Health Management Nutrition Reseate Dairy Production
Systems Ltd

Nick Tomsett Otautau

Peter Cook Oil Seed Products

Dear Nick & Peter

### Points:

- 1. Pasture Cover 2200 kg DM/ha and Soil temperature 10 degrees
- 2. The cows are looking excellent
  - a. Heifers have gained over 55 kg for the season
  - b. BCS 5.18 and very even
  - c. Rumen fill 5/5
  - d. Faecal score 3/5 and shaving cream consistency
- 3. Live weight for the herd average currently are 530 kg LWT.
- 4. Milking 1.88 kg MS/cow/day.

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5. Maintenance	66.3 MJ
6. Activity	10 MJ
7. Milk yield	144MJ
8. Calf 7 kg	7 MJ
9. Daily Intake	246 MJ
10. Residual MJ	12 MJ
11.ADG	0.27 kg/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)

Wraps

May 9th 40 x 240 kg 8t DM (May Milkers) You will need about 60 wraps fpr teh spring.

Hay

45 x 10s 11t

2017-18

Wheat \$402/t DOF 263t **DDG** \$407/t DOF 226t PKE \$216/t DOF 103t

### **Production Target**

2015 152,086 kg MS 2016 165,000 kg MS

2017 175,000 kg MS target

### **Stock Inventory**

 Total cows
 266

 Milking
 265

 Reds
 1

 R2
 83

 R1
 62

 Beefies
 5

Next year 2017-18 Winter 300 To milk 290

#### Ration

Effective area 77 ha
Grazing area 77 ha
Rotation 38 days

Pasture demand 36

PGR 35+ kg DM/ha/day

Herd Milkers Number 266 Area per day 2.0 ha Area per cow sqm 75sqm Pre graze mass 3000 Post graze mass 1600 Harvest 1400 Pasture intake kg DM/d 10.5

Starch Pellet (DM 90%) 2.77 DMI 2.5

DDG (DM 90%) 2.77 DMI 2.5

PKE (DM 92%) 2.77 DMI 2.55

Wraps 3/day DMI 2.7

Total DMI 21.0

 Salt
 12.5 kg
 50g

 MgO
 10.5 kg
 40g

 Lime Flour
 13.3 kg
 54g

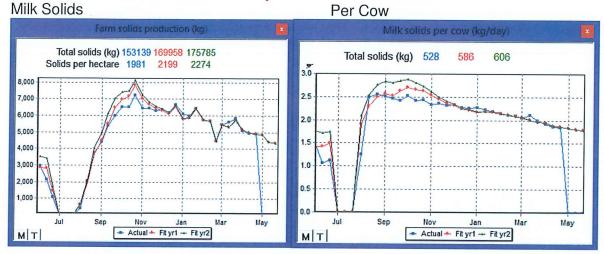
In line

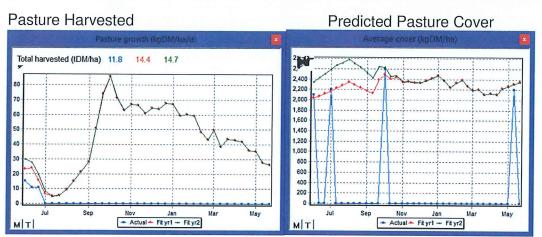
DairyMin 4 2.5mls
Prodairy 5-10mls
MgC 10g

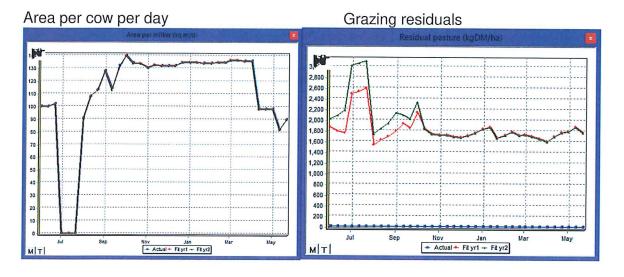
OSP DEMO FARM 0517

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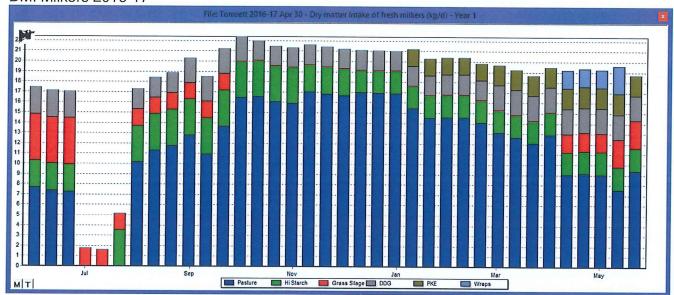
# Production Budget for OSP DEMO FARM Blue Actuals to date 2016-17 Red Projections for 2016-17



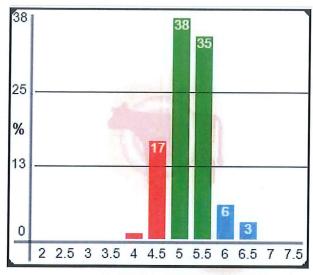




## DMI Milkers 2016-17



<b>Current Position</b>									
<b>Cow Condition</b>	Average	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
2015									
Aug 1 <sup>st</sup>	5.0								
Oct 21 <sup>st</sup>	4.6		1%	19%	43%	32%	5%		
2016									
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%	
2017									
May 9 <sup>th</sup>	5.18			1%	17%	38%	35%	6%	3%
	5.18			1%	17%	38%	35%	6%	3%



# Tonsett\_Nick\_DPS - Milkers

Tally	77	Avg Score	5.18	
		00010		

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

**Historical Dairy** 2015 June 1st 140 cows on crop July 25th Culled 2 cows Abortions July 31st 45 cows home Aug 1st 14 hfrs home Aug 10th 100 cows home Aug 10th Culled 3 cows Abortions Aug 15th SOA 12t applied Aug 20th 71 cows off (away until 27th) Aug 27th 50 lates off (away until Sep 7th) Sep 15th Urea 6t Oct 3<sup>rd</sup> R3 338 kg LWT Oct 10th Culled 2 cows Oct 21st Tail painted herd Oct 22<sup>nd</sup> PSM 280 cows BCS 4.6 Oct 25th Urea to follow the cows 80 kg/ha Nov 1st Silage harvested 7 ha Stack brought in 60t DM @ 30c/kg DM covered Nov 4th Super10 400 kg/ha whole farm 23t Nov 9th Culled 4 cows Dec 4th Grazed new grass Dec 5th Urea following the cows 55 @ kg/ha 72 ha Dec 7th Bulls into the herd Dec 20th Culled 3 cows Dec 20th Wraps taken 50 x 12s off 8 ha Dec 30th Scanned herd 2016 Jan 10th Bulls out Jan 15th Urea following the cows 80 @ kg/ha 72 ha Jan 10th PKE 11t Jan 31st PKE ended Feb 1st DO 2 cows Feb 10th Liners changed Feb 20th DAP 145 kg/ha whole farm (12t) Feb 23rd Scanned rechecks 16% MT Feb 20th Herd 493 kg LWT Mar 1st 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 9th Urea 90 kg/ha following cows Apr 15th Wraps made 600/ha 20 bales from 8 ha May 12th Urea ended 10t applied Culled 45 cows May 12th May 27th Culled 13 cows May 31st Culled 8 cows May 31st Returned 11 lease cows June 1st Milking 196 Dries 0 Hfrs 39 June 1st Hfrs 39 grazing off farm next door June 5th Scanned herd 6 MTs June 8th DO 80 cows DCT/TS (Dryclox DC) June 9th Dries onto the crop with wraps June 24th DO herd DCT/TS 28 did not dry off well June 24th Brought 50 R3 June 1st cows to come home Aug 1st

OSP DEMO FARM 0517

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Aug 1st

June 24th

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Grazed off 50 cows LC

R3s to come home (40)

Aug 15th SOA 150 kg/ha following cows 12t Aug 15th LC home (35) Aug 24th LC home (15) Sep 17th First round ended Sep 20th Calf milk 100 litres Sep 20th DAP 150 kg/ha Sulphurgain30 20 kg/ha 13.1t Sep 22<sup>nd</sup> Pre-graze mowing started Oct 9th Baleage cut 7 ha 50 Oct 10th LWT average 470 kg Oct 25th Culled 5 cows Oct 27th SustaiN 6t 70 kg/ha Nov 10th 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 1st 485 kg LWT Hfrs 445 kg Dec 16th SustaiN 6t 2017 Jan 9th DAP 11.2t Jan 15th Silage 5 ha wraps 50 Feb 5th Lime 1t/ha whole farm Feb 17th SustaiN 6.1t Mar 9th SustaiN 6t Mar 15th Silage 5 ha wraps 45 Mar 20th Pre-graze mowing ended Apr 3<sup>rd</sup> SustaiN 5.25t Mo May 5<sup>th</sup> Urea 4t

Next visit July 2017.

LWT 530 kg Hfrs 500 kg

### Regards

May 9th

Bryan McKay Dairy Production Systems Ltd

OSP DEMO Affected Herd Details Total Cows on Board June 1st Total Cows To Calve Mature Cow LWT Hfr LWT as % Adults -60 days R1 Mating LWT % Adults Weaing LWT % Adults Survival of Last Seaon's Heifers Calving analysis PSC Heifers	At ris	285 285	5	Average No	. Herds	ranger	Trigger
Total Cows To Calve Mature Cow LWT Hir LWT as % Adults -60 days R1 Mating LWT % Adults Weaing LWT % Adults Survival of Last Seaon's Heifers Calving analysis PSC Heifers		285					
Mature Cow LWT Hfr LWT as % Adults -60 days R1 Mating LWT % Adults Weaing LWT % Adults Survival of Last Seaon's Heifers Calving analysis PSC Heifers						1	
R1 Mating LWT % Adults Weaing LWT % Adults Survival of Last Seaon's Heifers Calving analysis PSC Heifers		530					
Weaing LWT % Adults Survival of Last Seaon's Heifers Calving analysis PSC Heifers		83%		88%	41	90%	80%
Survival of Last Seaon's Heifers  Calving analysis PSC Heifers		17%		61% 19%	28 43	65%	55%
PSC Heifers		1770		87%	14	20% 90%	15% 75%
	9 200						
Heifer Replacement Rate	114						
Calving to mid point		13.7%		21% 11	48 21	20% 10	25% 18
Heifers Calved by 6 weeks		75%		88%	19	90%	75%
Abortions/Wet-Dries in Heifers 13 PSC Adults		0.0%	0.0%	2.0%	40	1%	5%
BCS at Calving	493	01-Aug-16 5.40		5.16	42	5.00	4.50
Calving to mid point		20		17	18	18	25
Cows calved by 6 weeks 332 Abortions/Wet-Dries in Cows 32		75%	40%	82%	20	85%	70%
Abortions/Wet-Dries in Cows 32 Inductions Total Cows 0		0.0% 0.0%	3.6% 0.0%	1.5% 0.1%	43 49	2% 5%	5% 10%
Health Problems		5,0,1	0.07.0	01170	-10	370	10 /6
Calving Assists 8		17.5%	6.9%	2.9%	43	2%	10%
Twins 2 Retained Cleanings 6		3.5% 4.2%	0.0% 2.1%	1.8% 1.5%	43 44	2%	5%
Calves Born Dead 6		5.3%	5.2%	3.4%	34	5%	10%
Milk Fever 22		5.3%	2.4%	3.8%	44	2%	5%
Metabolic Disorders 0 Other Diseases 0		0.4% 0.7%	0.7% 0.0%	0.4% 0.6%	0 42	2%	5%
Total Deaths 13		2.5%	1.0%	1.8%	47	2% 2%	5% 5%
Mating Analysis							
PSM Cows to mate		23-Oct-16	21-Oct-15		- 1		
BCS at mating		273 4.76	276 4.60	4.59	41	4.50	4.00
Metricure Treated		0.4%	0.0%	5%	40	3%	10%
Aneostrus Treated			0				
Before Mating Start 0 In First Three Weeks 0		0% 0%	0% 0%	3% 3%	0		- 1
After Three Weeks 0		0%	0%	2%	ŏ		
Total Treated 0		0.0%	0.0%	7%	47	10%	25%
Submission Rate Submission Rate 3 Weeks		89%	55%	83%	34	90%	80%
Submission Rate 4 Weeks		0370	68%	91%	20	95%	85%
Bulls Run With Herd		12-Nov-16	07-Dec-15		- 1		
Bulls Withdrawn Mating Period Weeks		10-Jan-17 11.4	10-Jan-16 11.6	11.0	42	12	15
Pregnancy Tested	- 1	23-Feb-17	30-Dec-15	11.0	42	12	15
BCS at Lo Point BCS at Dry Off		4.75 5.20	4.60 4.90	4.39 5.05	22 8	4.5 4.5	4
Herd In Calf Rate	515	5/20	4.00	3.03	- 4	4.0	
One Week Herd In Calf Rate	38.30360		11%	16%	2	15%	5%
Two Week Herd In Calf Rate Three Week Herd In Calf Rate			26%	23% 44%	3 12	31%	21%
Four Week Herd In Call Rate	- 1		39% 45%	51%	5	46% 56%	36% 46%
Five Week Herd In Calf Rate			53%	53%	3	66%	56%
Six Week Herd In Calf Rate		69%	59%	69%	26	75%	65%
Seven Week Herd In Calf Rate Eight Week Herd In Calf Rate			66% 76%	72% 73%	4	80% 84%	70% 74%
Nine Week Herd In Calf Rate			79%	79%	8	88%	78%
Ten Week Herd In Calf Rate			81%	88%	4	90%	80%
Eleven Week Herd In Calf Rate Twelve Week Herd In Calf Rate		89%	82%	85%	8	92%	82%
Thirteen Week Herd In Call Rate			84%	87%	11	94% 95%	84% 85%
Forteen Week Herd In Calf Rate	- 1		- 1	88%	2	96%	86%
Fifteen Week Herd In Calf Rate	- 1		1			97%	87%
Sixteen Week Herd In Calf Rate Cows Not In Calf	515	11.0%	16.0%	12.5%	0 31	98% 10%	88% 15%
Mastitis						1070	1070
Ory Cow Mastitis Incicdence 0 Calving Mastitis Heifers Day 0-5 13	246	0.0%	0.0%	0.7%		1%	2%
Calving Mastitis Heifers Day 0-5 13 Calving Mastitis Adults Day 0-5 13	39 246	33.3% 5.3%	21.4% 5.4%	4.0% 3.2%	46 42	4% 4%	8% 8%
Monthly Mastitis Incidence Day 5+	2.0	0.070	0.470	0.270	72	4 /0	0 /8
une 0	285	0.0%	0.0%	0.1%	43	1%	2%
uly 0 august 0	285 285	0.0%	0.0%	0.4% 1.3%	43 39	1%	2%
September 2	285	0.0%	0,0% 2,5%	1.7%	39	1% 1%	2% 2%
October 5	273	1.8%	0.7%	2.1%	34	1%	2%
lovember 3 December 1	273	1.1%	2.1%	1.7%	32	1%	2%
ecember 1 anuary 1	273 273	0.4%	1.4% 0.4%	1.7% 1.3%	27 27	1% 1%	2% 2%
ebruary 0	273	0.0%	4.0%	0.9%	24	1%	2%
MarX 0	273	0.0%	0.7%	1.2%	20	1%	2%
pril 0 Nay 1	273 273	0.0% 0.4%	0.4%	1.0% 0.1%	16	1% 1%	2%
nnual Masitits Incidence 39	285	13.7%	12.1%	12.5%	48	10%	2% 20%
verage BMSCC		111000	127000	158455	44		50000
ame Cow Interventions	205	0.00/	0.00/	0.00/	40	001	401
une 0 uly 0	285 285	0.0%	0.0%	0.3% 0.5%	43	2% 2%	4% 4%
ugust 1	285	0.4%	1.1%	1.3%	38	2%	4%
eptember 2	285	0.7%	1.8%	1.4%	37	2%	4%
ctober 2 ovember 1	273 273	0.7%	1.4% 2.1%	2.0% 1.9%	34 32	2%	4%
ecember 2	273	0.7%	0.0%	1.9%	26	2% 2%	4% 4%
anuary 0	273	0.0%	0.4%	1.1%	26	2%	4%
ebruary 0 arX 0	273 273	0.0%	0.4%	1.0%	22	2%	4%
pril 0	273	0.0%	0.4% 0.7%	1.2% 1.1%	16 11	2% 2%	4% 4%
	273	0.7% 4.2%	1.4%	0.6%	2	2%	4%
ay 2 nnual Lame Cows Interventions 12	285		9.3%	8.3%	48	15%	25%

Farm		OSP DEMO	На			ow	lk Solids		
Metric				78		275	165,000		
Milk Payout		\$6.00	)	2115	•	600			
Income									
Milk Income	\$		\$	12,692	\$	3,600.00	\$ 6.00		
Cull Cows	\$	60,000	\$	769	\$	218.18	\$ 0.36		
Surplus Calves	\$ \$	7,000	\$	90	\$	25.45	\$ 0.04		
Other Income	\$	1,200	\$	15	\$	4.36	\$ 0.01	\$	0.41
Total Income	\$	1,058,200	\$	13,567	\$	3,848.00	\$ 6.41		
Expenses									
An. Health	\$	18,000	\$	231	\$	65.45	\$ 0.11		
Breeding	\$	14,000	\$	179	\$	50.91	\$ 0.08		
Dairy Shed	\$	7,000	\$	90	\$	25.45	\$ 0.04		
Electricity	\$	12,000	\$	154	\$	43.64	\$ 0.07		
Freight & Sundaries	\$	3,500	\$	45	\$	12.73	\$ 0.02		
Wages	\$ \$ \$	67,000	\$	859	\$	243.64	\$ 0.41	Ś	193.82
Fertilizer Excl N	\$	19,500	\$	250	\$	70.91	\$ 0.12	۲	133.02
Regrassing	\$	-	\$	-	\$	-	\$ -		
Irrigation	\$	1,500	\$	19	\$	5.45	\$ 0.01		
Weed & Pest	\$ \$	500	\$	6	\$	1.82	\$ 0.00		
Vehicles & Fuel	\$	7,500	\$	96	\$	27.27	\$ 0.05		
R & M	\$	10,000	\$	128	\$	36.36	\$ 0.06		
Admn.	\$	7,000	\$	90	\$	25.45	\$ 0.04		
Insurance		5,000	\$	64	\$	18.18	\$ 0.03		
ACC	\$	2,750	\$	35	\$	10.00	\$ 0.02		
Rates	\$ \$ \$	5,000	\$	64	\$	18.18	\$ 0.03		
Lease	\$	-	\$	_	\$	_	\$ -	\$	753.21
Nitrogen	\$	21,000	\$	269	\$	76.36	\$ 0.13		
Feeds	\$	222,500	\$	2,853	\$	809.09	\$ 1.35		
Grazing	\$	101,999	\$	1,308	\$	370.91	\$ 0.62		
Total FWE Expenses	\$	525,749	\$	6,740		1,911.81	\$ 3.19		
FWE. Excl Feed	\$	180,250	\$	2,311	\$	655.45	\$ 1.09		
Feed Costs N Feeds Grazing	\$	345,499	\$	4,429	\$	1,256.36	\$ 2.09		
FWE. Less Stock Sales	\$	457,549		5,866		1,663.81	\$ 2.77		
Management Imputation	\$	50,000	\$	641	\$	181.82	\$ 0.30		
EBITDA	\$	482,451	\$	6,185	\$	1,754.37	\$ 2.92		
Depreciation	\$	35,000	\$	449	\$	127.27	\$ 0.21		
Cost of Production	\$	610,749	\$	7,830	\$	2,220.91	\$ 3.70		
Financial Costs	\$	178,000		2,282	\$		\$ 1.08		
Net Profit	\$	269,451	\$	3,455	\$	979.82	\$ 1.63		
Breakeven Milk Price with debt							\$ 4.78		
Debt	\$	3,230,000.00							
PER kg MS	\$	19.58							

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