

### 1.0 Overview

This report provides details and commentary on the nutrient budgeting that has been undertaken for Woldwide Runoff (WR) and forms part of two wider resource consent applications for expanded dairying at Woldwide 1, 2, 4 & 5. Background information and details of the nutrient budgeting for Woldwide 1, 2, 4, 5 and Horner Block can be found in the associated nutrient budget analysis dated the 2<sup>nd</sup> August 2018.

WR is comprised of two separate blocks being the 385ha (~338ha effective) Merriburn Block and the 507ha (~321ha effective) Merrivale Block. The Merrivale Block is owned by the De Wolde's with the Merriburn Block being leased; however they are both run as a single farm. The two properties are located in Western Southland to the north east of Tuatapere.

WR is used to graze young stock from five dairy farms with baleage being made during periods of surplus grass production. Baleage is used to supplement the winter grazing of young stock at WR and is also sold to Woldwide Farms, Woldwide 4 and Woldwide 5. In addition to the raising of young stock and baleage production, WR also has approximately 100ha of commercial pine plantation and 60ha of Beech forest under a sustainable management plan.



In 2017/18 there were 1265 rising 1 year olds (R1's) at WR and 1265 rising 2 year olds (R2's). R2 numbers were trimmed to approximately 1150 in March due to a cull of empty cows (not in calve). In addition to the R1's and R2's there were 37 empty carry over cows and 70 mating bulls (1<sup>st</sup> November to 10<sup>th</sup> January) grazing on WR

In 2017/18 there was 52ha of Kale grown on the property (36.5ha on Merriburn and 15.5ha on Merrivale) to facilitate the wintering of the 1265 R1's between the 20<sup>th</sup> May and the 10<sup>th</sup> August. In addition to Kale, R1's were also feed approximately 1188 bales of baleage (240kg/DM).

Fertiliser inputs into the nutrient budget are based on purchase records from Ravensdown for the 2017-18 season, with soil test results entered as an Olsen P level of 25, which is the long term objective for WR. On certain areas of the Merrivale Block capital applications of phosphorus were applied in 17/18 to lift Olsen P levels.

	<b>Total 17/18</b>	<b>Per/ha 17/18</b>
<b>Nitrogen Loss (kg/N)</b>	19868	22
<b>Phosphorus Loss (Kg/P)</b>	529	0.6
<b>Pasture Production (kg/DM)</b>		10928

## 2.0 Modelling Inputs

To construct the nutrient budgets the following input data has been used;

### 2.1 Blocks

WR has been split into the following blocks:

<b>Block Name</b>	<b>Soil Type</b>	<b>Size (ha)</b>
Merriburn	lhak_23a.1	140
Merriburn	Apar_6a.1	27.5
Merriburn Lower Fert	lhak_23a.1	139.7
Merriburn Lower Fert	Apar_6a.1	21.1
Merriburn No Fert	lhak_23a.1	9.5
Merrivale	Waiki_36a.1	176.5
Merrivale	Makar_3b.1	31.9
Merrivale Lower Fert	Waiki_36a.1	42.7
Merrivale Lower Fert	Malok_3a.1	27.7
Merrivale No Fert	Malok_3a.1	28.1
Merrivale No Fert	Waiki_36a.1	14.3
Kale	Rotating	Rotating (52ha)
<b>Effective Farm Area</b>		<b>659</b>
Plantation Forest		100
Beech Forest		60
Non-Productive		73
<b>Total Farm Area</b>		<b>892</b>

- Soil areas were obtained from Smap/Environment Southland.
- Soil settings were obtained from SMap for all soil types.

## 2.2 Climate Data

- Location setting = Southland
- Climate station tool used for block climate data
  - 1147 - 1185mm of rainfall
  - 9.9 - 10°C mean annual temperature
  - 731-1450mm daily rainfall pattern. Low variation.
  - 737 - 743mm mean annual PET

## 2.3 Farm System Inputs

Description	17/18 Season			
	<u>R1's – Friesian</u>	<u>R2's – Friesian</u>	<u>Carry Overs</u>	<u>Mating Bulls</u>
Stock on Farm	July – 0 Aug – 0 Sep – 0 Oct – 0 Nov – 1265 Dec – 1265 Jan – 1265 Feb – 1265 Mar – 1265 Apr – 1265 May – 1265 June – 1265	July – 1265 Aug – 1265 Sep – 1265 Oct – 1265 Nov – 1265 Dec – 1265 Jan – 1265 Feb – 1265 Mar – 1150 Apr – 1150 May – 1150 June – 0	July – 37 Aug – 37 Sep – 37 Oct – 37 Nov – 37 Dec – 37 Jan – 37 Feb – 37 Mar – 37 Apr – 37 May – 37 June – 37	July – 0 Aug – 0 Sep – 0 Oct – 0 Nov – 70 Dec – 70 Jan – 23 Feb – 0 Mar – 0 Apr – 0 May – 0 June – 0
Crop Area & Inputs	<u>52ha Kale (15.5ha Merrivale &amp; 36.5ha Merriburn)</u> - 12T/DM/ha - Direct Drilled November - 46kg/ha/N; 49kg/ha/P; 48kg/ha/K applied in December - Grazed 24hrs a day 20 <sup>th</sup> May to 10 <sup>th</sup> August by R1's (entered as June, July August in Overseer as can't use part months) - Re-sown to grass in October			
Supplements	<u>Made on Farm</u> - 1188 (240kg/DM) bales of baleage = 285T/DM → Feed on Kale Crop - 2854 (240kg/DM) bales of baleage = 685T/DM → Exported off WR			
Fertiliser	<u>Merriburn</u>  136kg/N/ha (Sep, Dec, Feb) 20kg/P/ha (Dec) 26kg/K/ha (Dec)	<u>Merriburn Lower Fert</u>  36kg/N/ha (Sep, Dec, Feb) 25kg/P/ha (Dec) 16kg/K/ha (Dec)	<u>Merrivale</u>  165kg/N/ha (Aug, Nov, Sep, Feb) 59kg/P/ha (Nov & Jan) 99kg/K/ha (Nov & Jan)	<u>Merrivale Lower Fert</u>  57kg/N/ha (Sep & Nov) 22kg/P/ha (Nov) 25kg/K/ha (Nov)

### 3.0 Modelling Results

	<b>Total 17/18</b>	<b>Per/ha 17/18</b>
<b>Nitrogen Loss (kg/N)</b>	19868	22
<b>Phosphorus Loss (Kg/P)</b>	529	0.6
<b>Pasture Production (kg/DM)</b>		10928












### 4.0 Proposed Scenario

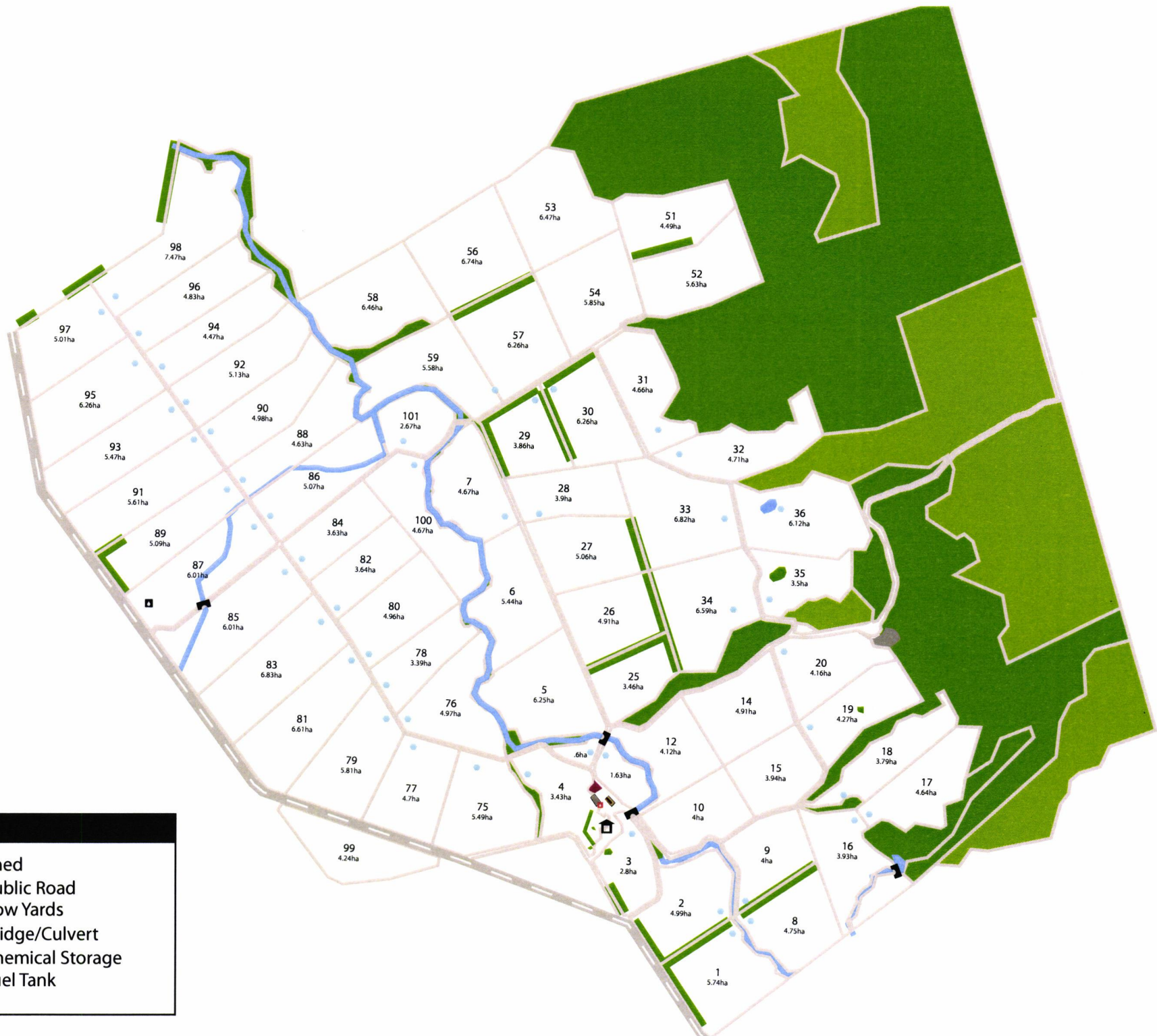
No proposed scenario has been modelled as the operation of WR is planned to continue within the nutrient loss parameters outlined in Section 3.0. On this basis the proposed nutrient budget is identical to that produced for the 17/18 season.

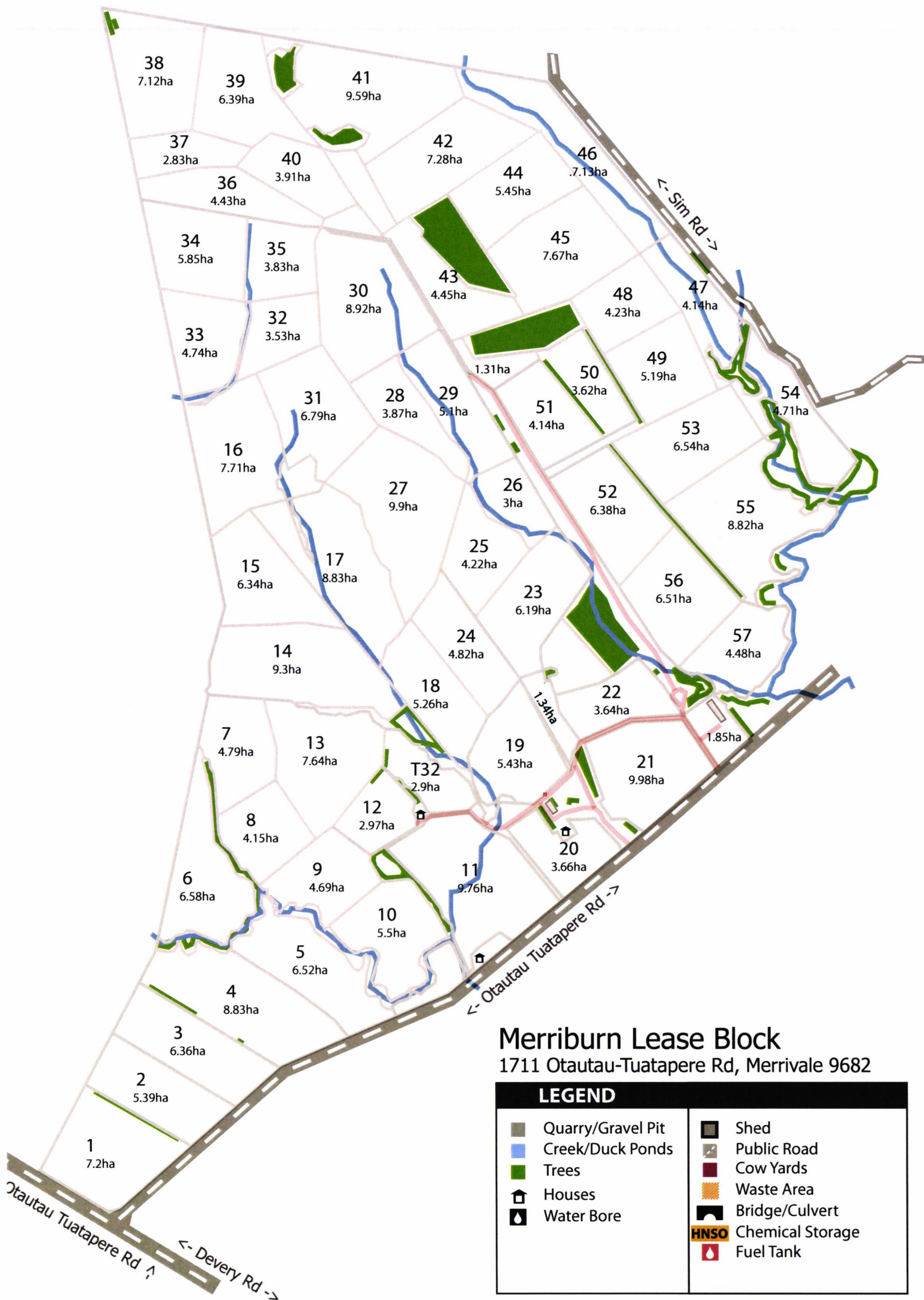
## Appendix 1 – Block & Farm Maps

# Woldwide Run-Off

20 Gill Rd, Merrivale 9682

LEGEND	
	Quarry/Gravel Pit
	Creek/Duck Ponds
	Trees
	Houses
	Water Bore
	Shed
	Public Road
	Cow Yards
	Bridge/Culvert
	Chemical Storage
	Fuel Tank





Lot Number	Area (ha)
1	7.2ha
2	5.39ha
3	6.36ha
4	8.83ha
5	6.52ha
6	6.58ha
7	4.79ha
8	4.15ha
9	4.69ha
10	5.5ha
11	9.76ha
12	2.97ha
13	7.64ha
14	9.3ha
15	6.34ha
16	7.71ha
17	8.83ha
18	5.26ha
19	5.43ha
20	3.66ha
21	9.98ha
22	3.64ha
23	6.19ha
24	4.82ha
25	4.22ha
26	3ha
27	9.9ha
28	3.87ha
29	5.1ha
30	8.92ha
31	6.79ha
32	3.53ha
33	4.74ha
34	5.85ha
35	3.83ha
36	4.43ha
37	2.83ha
38	7.12ha
39	6.39ha
40	3.91ha
41	9.59ha
42	7.28ha
43	4.45ha
44	5.45ha
45	7.67ha
46	7.13ha
47	4.14ha
48	4.23ha
49	5.19ha
50	3.62ha
51	4.14ha
52	6.38ha
53	6.54ha
54	4.71ha
55	8.82ha
56	6.51ha
57	4.48ha
T32	2.9ha







# Appendix 2 – Nutrient Budgets & Block Reports

Abe De Wolde

Cain Duncan

Woldwide Runoff

Fonterra

Client reference:

Farm name: Woldwide Runoff (Merrivale & Merriburn) (17/18)

## Farm Nutrient Budget - Whole farm

	N	P	K	S	Ca	Mg	Na
	(kg/ha/yr)						
<b>Nutrients added</b>							
Fertiliser, lime & other	79	25	33	31	0	0	0
Rain/clover N fixation	41	0	2	5	3	7	31
Irrigation	0	0	0	0	0	0	0
Supplements imported	0	0	0	0	0	0	0
<b>Nutrients removed</b>							
As products	14	4	1	2	7	0	0
Exported effluent	0	0	0	0	0	0	0
As supplements	14	2	15	1	3	1	1
To atmospheric	28	0	0	0	0	0	0
To water	22	0.6	8	36	24	6	25
<b>Change in internal pools</b>							
Plant material	1	0	-7	2	0	0	0
Organic pool	38	7	1	-5	0	0	0
Inorganic mineral	0	2	-15	0	-2	-3	-3
Inorganic soil pool	3	9	34	0	-31	3	7

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Abe De Wolde  
Woldwide Runoff  
Client reference:

Cain Duncan  
Fonterra

Farm name: Woldwide Runoff (Merrivale & Merriburn) (17/18)

## Block Nitrogen

Block name	Total N lost (kg N/yr)	N lost to water (kg N/ha/yr)	N in drainage * (ppm)	N surplus (kg N/ha/yr)	Added N ** (kg N/ha/yr)
Merriburn (Ihak_23a.1) ##	2646	21	4.5	132	136
Merriburn (Apar_6a.1) ##	445	18	3.9	132	136
Merriburn Lower Fert (Ihak_23a.1) ##	2486	20	4.2	100	72
Merriburn Lower Fert (Apar_6a.1) ##	332	17	3.8	100	72
Merriburn No Fert (Ihak_23a.1)	204	21	4.6	86	0
Merrivale (Waiki_36a.1) ##	5015	31	6.1	139	165
Merrivale (Makar_3b.1) ##	603	21	4.2	140	165
Merrivale Lower Fert (Waiki_36a.1)	882	21	N/A	95	57
Merrivale Lower Fert (Malok_3a.1)	683	25	N/A	97	57
Merrivale No Fert (Malok_3a.1)	769	27	N/A	88	0
Merrivale No Fert (Waiki_36a.1)	327	23	N/A	86	0
Kale	4721	91	<b>15.3</b>	150	82
Plantation Forest	250	2	N/A		
Beech Forest	180	3	N/A		
Other farm sources	325				
Whole farm	19868	22			
Less N removed in wetlands	0				
Farm output	19868	22			

\* Estimated N concentration in drainage water at the bottom of the root zone. Maximum recommended level for drinking water is 11.3 ppm (note that this is not an environmental water quality standard).

\*\* Sum of fertiliser and external factory effluent inputs.

N/A: N in drainage not calculated for easy and steep pastoral blocks, or for tree and shrubs, riparian, wetland or house blocks.

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Abe De Wolde  
 Woldwide Runoff  
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 Fonterra

Farm name: Woldwide Runoff (Merrivale & Merriburn) (17/18)

## Block Phosphorus

Block name	Total P lost (kg P/yr)	P lost (kg P/ha/yr)	P loss categories		
			Soil	Fertiliser	Effluent
Merriburn (Ihak_23a.1) ##	72	0.6	Low	Low	n/a
Merriburn (Apar_6a.1) ##	14	0.6	Low	Low	n/a
Merriburn Lower Fert (Ihak_23a.1) ##	73	0.6	Low	Low	n/a
Merriburn Lower Fert (Apar_6a.1) ##	11	0.6	Low	Low	n/a
Merriburn No Fert (Ihak_23a.1)	5	0.5	Low	n/a	n/a
Merrivale (Waiki_36a.1) ##	97	0.6	Low	Medium	n/a
Merrivale (Makar_3b.1) ##	62	2.1	High	High *	n/a
Merrivale Lower Fert (Waiki_36a.1)	32	0.8	Low	Low	n/a
Merrivale Lower Fert (Malok_3a.1)	22	0.8	Medium	Low	n/a
Merrivale No Fert (Malok_3a.1)	21	0.7	Medium	n/a	n/a
Merrivale No Fert (Waiki_36a.1)	10	0.7	Low	n/a	n/a
Kale	23	0.4	n/a	n/a	n/a
Plantation Forest	12	0.1	n/a	n/a	n/a
Beech Forest	6	0.1	n/a	n/a	n/a
Other farm sources	70				
Whole farm	529	0.6			

\*\* Fertiliser loss is outside the range for New Zealand data - see comments for each block

## Has a fodder crop rotating though, results for pastoral block component only

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## Appendix 3 – Fertiliser Records

## Nutrient summary report

WORLDWIDE RUNOFF LTD - 60842387

Query range : 01 Jun 2017 to 31 May 2018

Name	Date	Area (ha)	Product	Rate (kg/ha or l/ha)	N kg/ha	P kg/ha	K kg/ha	S kg/ha	Ca kg/ha	Mg kg/ha
1	16/08/2017	5.3	RZR - AMM SE	134	48	-	-	13	-	-
	08/12/2017	5.2	WW R/off Post Cut Maintenance	1410	22	55	102	67	317	3
	13/02/2018	5.3	UREA BULK	109	50	-	-	-	-	-
	<b>Area weighted total</b>					<b>110</b>	<b>50</b>	<b>93</b>	<b>73</b>	<b>289</b>
10	16/08/2017	1.7	RZR - AMM SE	130	46	-	-	12	-	-
	13/02/2018	3.8	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>					<b>67</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>-</b>
100	16/08/2017	3.9	RZR - AMM SE	139	50	-	-	13	-	-
	05/09/2017	3.8	UREA BULK	151	69	-	-	-	-	-
	21/11/2017	4	WW R/off Post Cut Maintenance	1403	22	55	101	67	316	3
	12/02/2018	4.1	Urea	111	51	-	-	-	-	-
	<b>Area weighted total</b>					<b>161</b>	<b>47</b>	<b>87</b>	<b>68</b>	<b>271</b>
101	16/08/2017	2.1	RZR - AMM SE	135	48	-	-	13	-	-
	05/09/2017	2.3	UREA BULK	135	62	-	-	-	-	-
	21/11/2017	2.5	WW R/off Post Cut Maintenance	1426	23	56	103	68	321	3
	12/02/2018	2.5	Urea	113	52	-	-	-	-	-
	<b>Area weighted total</b>					<b>161</b>	<b>52</b>	<b>97</b>	<b>74</b>	<b>302</b>
12	16/08/2017	3.4	RZR - AMM SE	137	49	-	-	13	-	-
	08/01/2018	3.7	WW R/Off Pot super/Flexi/Lime	1052	23	34	33	41	275	3

	13/02/2018	3.7	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>107</b>	<b>30</b>	<b>30</b>	<b>48</b>	<b>246</b>	<b>3</b>
14	08/01/2018	4.6	VW R/Off Pot super/Flexi/Lime	1035	23	33	32	40	271	3
	13/02/2018	4.7	UREA BULK	106	49	-	-	-	-	-
	<b>Area weighted total</b>				<b>67</b>	<b>31</b>	<b>30</b>	<b>38</b>	<b>252</b>	<b>3</b>
15	22/11/2017	2	SELENIUM SELPRILL DOUBLE 2%SE DG CL *	219	-	-	-	-	-	-
	08/01/2018	1.3	VW R/Off Pot super/Flexi/Lime	1152	25	37	36	45	301	3
	14/03/2018	3.1	UREA	107	49	-	-	-	-	-
	<b>Area weighted total</b>				<b>47</b>	<b>12</b>	<b>12</b>	<b>15</b>	<b>101</b>	<b>1</b>
16	22/11/2017	3.1	SELENIUM SELPRILL DOUBLE 2%SE DG CL *	224	-	-	-	-	-	-
	13/02/2018	3.7	UREA BULK	108	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>46</b>	-	-	-	-	-
16b	22/11/2017	0.4	SELENIUM SELPRILL DOUBLE 2%SE DG CL *	230	-	-	-	-	-	-
	13/02/2018	0.8	UREA BULK	121	55	-	-	-	-	-
	<b>Area weighted total</b>				<b>45</b>	-	-	-	-	-
17	22/11/2017	3.8	SELENIUM SELPRILL DOUBLE 2%SE DG CL *	233	-	-	-	-	-	-
	<b>Area weighted total</b>				-	-	-	-	-	-
18	22/11/2017	3.3	SELENIUM SELPRILL DOUBLE 2%SE DG CL *	227	-	-	-	-	-	-
	<b>Area weighted total</b>				-	-	-	-	-	-



19	13/02/2018	4.1	UREA BULK	110	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>48</b>	-	-	-	-	-
2	16/08/2017	4.4	RZR - AMM SE	131	47	-	-	13	-	-
	08/12/2017	4.6	WW R/off Post Cut Maintenance	1413	23	55	102	67	318	3
	13/02/2018	4.7	UREA BULK	109	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>110</b>	<b>51</b>	<b>94</b>	<b>73</b>	<b>293</b>	<b>3</b>
20	08/01/2018	3.3	WW R/Off Pot super/Flexi/Lime	1051	23	34	33	41	275	3
	<b>Area weighted total</b>				<b>19</b>	<b>27</b>	<b>27</b>	<b>33</b>	<b>221</b>	<b>2</b>
25	22/11/2017	3.2	WW R/Off Pot super/Flexi/Lime	1003	22	32	31	39	262	3
	13/02/2018	3.3	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>69</b>	<b>29</b>	<b>29</b>	<b>36</b>	<b>240</b>	<b>3</b>
26	22/11/2017	4.3	WW R/Off Pot super/Flexi/Lime	1015	22	32	32	40	265	3
	13/02/2018	4.5	UREA BULK	109	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>65</b>	<b>28</b>	<b>28</b>	<b>35</b>	<b>233</b>	<b>2</b>
27	22/11/2017	3.8	WW R/Off Pot super/Flexi/Lime	1049	23	34	33	41	274	3
	13/02/2018	4.3	UREA BULK	108	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>60</b>	<b>25</b>	<b>25</b>	<b>31</b>	<b>208</b>	<b>2</b>
28	22/11/2017	3.5	WW R/Off Pot super/Flexi/Lime	1030	23	33	32	40	269	3
	13/02/2018	3.8	UREA BULK	108	49	-	-	-	-	-
	<b>Area weighted total</b>				<b>68</b>	<b>30</b>	<b>29</b>	<b>37</b>	<b>244</b>	<b>3</b>
29	16/08/2017	3.4	RZR - AMM SE	135	48	-	-	13	-	-
	08/01/2018	3.3	WW R/Off Pot super/Flexi/Lime	1009	22	32	32	39	264	3
	13/02/2018	3.5	UREA BULK	110	51	-	-	-	-	-

	<b>Area weighted total</b>				<b>108</b>	<b>27</b>	<b>27</b>	<b>45</b>	<b>224</b>	<b>2</b>
2A	05/09/2017	1.6	AMMO 36 BULK	138	49	-	-	13	-	-
	12/02/2018	1.9	UREA BULK	123	56	-	-	-	-	-
	<b>Area weighted total</b>				<b>87</b>	-	-	<b>10</b>	-	-
3	16/08/2017	2.4	RZR - AMM SE	138	49	-	-	13	-	-
	22/11/2017	2.3	WW R/Off Pot super/Flexi/Lime	1028	23	33	32	40	269	3
	13/02/2018	2.5	UREA BULK	110	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>105</b>	<b>27</b>	<b>26</b>	<b>44</b>	<b>221</b>	<b>2</b>
30	16/08/2017	4	RZR - AMM SE	128	46	-	-	12	-	-
	13/02/2018	4.4	UREA BULK	111	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>79</b>	-	-	<b>10</b>	-	-
31	08/01/2018	4.1	WW R/Off Pot super/Flexi/Lime	1058	23	34	33	41	277	3
	<b>Area weighted total</b>				<b>21</b>	<b>30</b>	<b>29</b>	<b>37</b>	<b>246</b>	<b>3</b>
32	22/11/2017	4.2	SELENIUM SELPRILL DOUBLE 2%SE DG CL *	237	-	-	-	-	-	-
	<b>Area weighted total</b>				-	-	-	-	-	-
33	21/11/2017	4.5	WW R/off Post Cut Maintenance	1471	23	57	106	70	331	3
	13/02/2018	5.7	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>58</b>	<b>38</b>	<b>71</b>	<b>47</b>	<b>220</b>	<b>2</b>
34	22/11/2017	5.9	SELENIUM SELPRILL DOUBLE 2%SE DG CL *	224	-	-	-	-	-	-
	13/02/2018	6.2	UREA BULK	107	49	-	-	-	-	-
	<b>Area weighted total</b>				<b>46</b>	-	-	-	-	-
35	22/11/2017	2.8	SELENIUM SELPRILL DOUBLE 2%SE DG CL *	234	-	-	-	-	-	-

	<b>Area weighted total</b>				-	-	-	-	-	-
36	22/11/2017	5.3	SELENIUM SELPRILL DOUBLE 2%SE DG CL *	225	-	-	-	-	-	-
	<b>Area weighted total</b>				-	-	-	-	-	-
4a	<b>Area weighted total</b>				-	-	-	-	-	-
4b	16/08/2017	3	RZR - AMM SE	142	51	-	-	14	-	-
	22/11/2017	3.2	WW R/Off Pot super/Flexi/Lime	1031	23	33	32	40	270	3
	13/02/2018	3	UREA BULK	112	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>110</b>	<b>30</b>	<b>30</b>	<b>49</b>	<b>249</b>	<b>3</b>
4c	<b>Area weighted total</b>				-	-	-	-	-	-
5	16/08/2017	5.6	RZR - AMM SE	132	47	-	-	13	-	-
	30/11/2017	6	MURIVALE KALE	392	58	66	28	3	-	-
	<b>Area weighted total</b>				<b>98</b>	<b>63</b>	<b>26</b>	<b>14</b>	-	-
51	<b>Area weighted total</b>				-	-	-	-	-	-
52	<b>Area weighted total</b>				-	-	-	-	-	-
53	<b>Area weighted total</b>				-	-	-	-	-	-
54	<b>Area weighted total</b>				-	-	-	-	-	-
56	16/08/2017	6.3	RZR - AMM SE	133	48	-	-	13	-	-
	08/01/2018	6.3	WW R/Off Pot super/Flexi/Lime	990	22	32	31	39	259	3
	13/02/2018	6.5	UREA BULK	108	49	-	-	-	-	-
	<b>Area weighted total</b>				<b>112</b>	<b>29</b>	<b>29</b>	<b>48</b>	<b>240</b>	<b>3</b>
57	16/08/2017	5.5	RZR - AMM SE	128	46	-	-	12	-	-
	22/11/2017	5.9	WW R/Off Pot super/Flexi/Lime	988	22	32	31	39	258	3
	13/02/2018	5.9	UREA BULK	108	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>108</b>	<b>30</b>	<b>29</b>	<b>47</b>	<b>244</b>	<b>3</b>
58	16/08/2017	6	RZR - AMM SE	137	49	-	-	13	-	-

	05/09/2017	5.9	UREA BULK	128	59	-	-	-	-	-
	08/12/2017	5.8	VW R/off Post Cut Maintenance	1417	23	55	102	67	319	3
	13/02/2018	6.1	UREA BULK	105	48	-	-	-	-	-
	<b>Area weighted total</b>				<b>166</b>	<b>49</b>	<b>91</b>	<b>72</b>	<b>285</b>	<b>3</b>
59	16/08/2017	5.2	RZR - AMM SE	137	49	-	-	13	-	-
	05/09/2017	5.2	UREA BULK	135	62	-	-	-	-	-
	08/01/2018	4.9	VW R/Off Pot super/Flexi/Lime	1007	22	32	32	39	263	3
	13/02/2018	5.3	UREA BULK	106	49	-	-	-	-	-
	<b>Area weighted total</b>				<b>168</b>	<b>28</b>	<b>28</b>	<b>47</b>	<b>230</b>	<b>2</b>
6	16/08/2017	5	RZR - AMM SE	136	48	-	-	13	-	-
	30/11/2017	5.3	MURIVALE KALE	396	59	67	28	3	-	-
	<b>Area weighted total</b>				<b>102</b>	<b>65</b>	<b>27</b>	<b>15</b>	-	-
7	16/08/2017	4	RZR - AMM SE	133	48	-	-	13	-	-
	30/11/2017	4.4	MURIVALE KALE	404	60	68	28	3	-	-
	<b>Area weighted total</b>				<b>97</b>	<b>64</b>	<b>27</b>	<b>14</b>	-	-
75	16/08/2017	5.2	RZR - AMM SE	129	46	-	-	12	-	-
	05/09/2017	5.3	UREA BULK	129	59	-	-	-	-	-
	22/11/2017	5.2	VW R/Off Pot super/Flexi/Lime	997	22	32	31	39	261	3
	08/01/2018	5	VW R/Off Pot super/Flexi/Lime	973	21	31	31	38	254	3
	<b>Area weighted total</b>				<b>141</b>	<b>59</b>	<b>58</b>	<b>84</b>	<b>482</b>	<b>5</b>
76	16/08/2017	4.5	RZR - AMM SE	147	52	-	-	14	-	-
	05/09/2017	4.5	UREA BULK	136	63	-	-	-	-	-
	22/11/2017	4.6	VW R/Off Pot super/Flexi/Lime	999	22	32	31	39	261	3
	12/02/2018	4.5	Urea	117	54	-	-	-	-	-
	14/03/2018	4	UREA	104	48	-	-	-	-	-

	<b>Area weighted total</b>				<b>212</b>	<b>30</b>	<b>29</b>	<b>49</b>	<b>244</b>	<b>3</b>
77	16/08/2017	4.5	RZR - AMM SE	133	47	-	-	13	-	-
	05/09/2017	4.6	UREA BULK	134	61	-	-	-	-	-
	28/10/2017	4.5	Post Cust - Grazed mix	1062	36	27	65	33	256	5
	08/01/2018	4.5	WW R/Off Pot super/Flexi/Lime	1033	23	33	32	40	270	3
	<b>Area weighted total</b>				<b>161</b>	<b>58</b>	<b>93</b>	<b>83</b>	<b>504</b>	<b>7</b>
78	16/08/2017	3.3	RZR - AMM SE	141	50	-	-	13	-	-
	05/09/2017	3.3	UREA BULK	134	62	-	-	-	-	-
	28/10/2017	3.2	Post Cust - Grazed mix	1064	36	27	65	33	256	5
	08/12/2017	3	WW R/off Post Cut Maintenance	1513	24	59	109	72	340	3
	12/02/2018	3.3	Urea	113	52	-	-	-	-	-
	<b>Area weighted total</b>				<b>214</b>	<b>78</b>	<b>159</b>	<b>109</b>	<b>545</b>	<b>7</b>
79	16/08/2017	5.7	RZR - AMM SE	132	47	-	-	13	-	-
	05/09/2017	5.6	UREA BULK	130	60	-	-	-	-	-
	28/10/2017	5.7	Post Cust - Grazed mix	1051	36	27	64	33	253	4
	08/01/2018	5.6	WW R/Off Pot super/Flexi/Lime	1002	22	32	31	39	262	3
	21/02/2018	5.6	UREA BULK	110	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>209</b>	<b>57</b>	<b>93</b>	<b>82</b>	<b>498</b>	<b>7</b>
8	13/02/2018	4.5	UREA BULK	108	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>47</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
80	16/08/2017	4.7	RZR - AMM SE	129	46	-	-	12	-	-
	05/09/2017	4.9	UREA BULK	126	58	-	-	-	-	-
	12/02/2018	4.9	Urea	107	49	-	-	-	-	-
	<b>Area weighted total</b>				<b>149</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>-</b>	<b>-</b>

81	16/08/2017	6.3	RZR - AMM SE	124	44	-	-	12	-	-
	05/09/2017	6.4	UREA BULK	124	57	-	-	-	-	-
	28/10/2017	6.4	Post Cust - Grazed mix	1028	35	26	63	32	248	4
	08/01/2018	6.4	VW R/Off Pot super/Flexi/Lime	1042	23	33	33	41	272	3
	13/02/2018	5.1	UREA BULK	102	47	-	-	-	-	-
	<b>Area weighted total</b>					<b>189</b>	<b>58</b>	<b>93</b>	<b>82</b>	<b>503</b>
82	16/08/2017	3.4	RZR - AMM SE	123	44	-	-	12	-	-
	05/09/2017	3.5	UREA BULK	119	55	-	-	-	-	-
	28/10/2017	3.6	Post Cust - Grazed mix	1107	37	28	68	35	267	5
	08/12/2017	3.4	VW R/off Post Cut Maintenance	1525	24	59	110	73	343	3
	12/02/2018	3.6	Urea	100	46	-	-	-	-	-
	<b>Area weighted total</b>					<b>198</b>	<b>83</b>	<b>168</b>	<b>112</b>	<b>578</b>
83	16/08/2017	6.7	RZR - AMM SE	128	46	-	-	12	-	-
	05/09/2017	6.7	UREA BULK	129	59	-	-	-	-	-
	28/10/2017	4.7	Post Cust - Grazed mix	1062	36	27	65	33	256	5
	28/10/2017	1.9	Post Cust - Grazed mix	1001	34	26	61	31	241	4
	08/01/2018	6.5	VW R/Off Pot super/Flexi/Lime	1135	25	36	36	44	297	3
	12/02/2018	6.7	Urea	111	51	-	-	-	-	-
	<b>Area weighted total</b>					<b>210</b>	<b>61</b>	<b>96</b>	<b>86</b>	<b>527</b>
84	16/08/2017	3.2	RZR - AMM SE	125	45	-	-	12	-	-
	05/09/2017	3.5	UREA BULK	139	64	-	-	-	-	-
	28/10/2017	3.5	Post Cust - Grazed mix	1084	37	28	66	34	261	5

	08/12/2017	3.3	WW R/off Post Cut Maintenance	1466	23	57	106	70	330	3
	12/02/2018	3.6	Urea	113	52	-	-	-	-	-
	<b>Area weighted total</b>				<b>209</b>	<b>79</b>	<b>160</b>	<b>107</b>	<b>552</b>	<b>7</b>
85	16/08/2017	6.4	RZR - AMM SE	135	48	-	-	13	-	-
	05/09/2017	6.6	UREA BULK	133	61	-	-	-	-	-
	28/10/2017	6.3	Post Cust - Grazed mix	1083	37	28	66	34	261	5
	08/12/2017	6.6	WW R/off Post Cut Maintenance	1407	22	55	101	67	317	3
	12/02/2018	6.7	Urea	113	52	-	-	-	-	-
	<b>Area weighted total</b>				<b>203</b>	<b>75</b>	<b>153</b>	<b>104</b>	<b>524</b>	<b>7</b>
86	16/08/2017	4.4	RZR - AMM SE	139	50	-	-	13	-	-
	05/09/2017	4.5	UREA BULK	137	63	-	-	-	-	-
	08/12/2017	4.1	WW R/off Post Cut Maintenance	1537	24	60	111	73	346	3
	<b>Area weighted total</b>				<b>118</b>	<b>49</b>	<b>91</b>	<b>71</b>	<b>283</b>	<b>3</b>
87	16/08/2017	5.5	RZR - AMM SE	147	52	-	-	14	-	-
	05/09/2017	5.4	UREA BULK	142	65	-	-	-	-	-
	08/12/2017	0	WW R/off Post Cut Maintenance	1300	21	51	94	62	293	3
	08/12/2017	5.4	WW R/off Post Cut Maintenance	1490	24	58	107	71	335	3
	21/02/2018	5.4	UREA BULK	113	52	-	-	-	-	-
	<b>Area weighted total</b>				<b>173</b>	<b>52</b>	<b>96</b>	<b>76</b>	<b>299</b>	<b>3</b>
88	16/08/2017	4	RZR - AMM SE	135	48	-	-	13	-	-
	05/09/2017	4.3	UREA BULK	142	65	-	-	-	-	-
	28/10/2017	4.3	Post Cust - Grazed mix	1050	35	27	64	33	253	4

	08/12/2017	4.1	WW R/off Post Cut Maintenance	1444	23	56	104	69	325	3
	<b>Area weighted total</b>				<b>156</b>	<b>75</b>	<b>153</b>	<b>103</b>	<b>525</b>	<b>7</b>
89	16/08/2017	4.8	RZR - AMM SE	127	45	-	-	12	-	-
	05/09/2017	4.8	UREA BULK	136	62	-	-	-	-	-
	28/10/2017	0.6	Post Cust - Grazed mix	982	33	25	60	31	237	4
	28/10/2017	4.1	Post Cust - Grazed mix	1026	35	26	63	32	247	4
	08/12/2017	4.8	WW R/off Post Cut Maintenance	1371	22	53	99	65	309	3
	21/02/2018	4.9	UREA BULK	111	51	-	-	-	-	-
		<b>Area weighted total</b>				<b>203</b>	<b>75</b>	<b>151</b>	<b>103</b>	<b>519</b>
9	13/02/2018	3.3	UREA BULK	109	50	-	-	-	-	-
		<b>Area weighted total</b>				<b>42</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
90	16/08/2017	4.1	RZR - AMM SE	130	46	-	-	12	-	-
	05/09/2017	4.8	UREA BULK	134	62	-	-	-	-	-
	28/10/2017	4.9	Post Cust - Grazed mix	1096	37	28	67	34	264	5
	29/01/2018	4.7	WW R/off Post Cut Maintenance	1410	22	55	102	67	317	3
		<b>Area weighted total</b>				<b>155</b>	<b>79</b>	<b>162</b>	<b>107</b>	<b>557</b>
91	16/08/2017	5.3	RZR - AMM SE	114	41	-	-	11	-	-
	05/09/2017	5.4	UREA BULK	112	52	-	-	-	-	-
	28/10/2017	1.6	Post Cust - Grazed mix	1081	37	28	66	34	260	5
	28/10/2017	3.8	Post Cust - Grazed mix	1063	36	27	65	33	256	5
	08/12/2017	5.4	WW R/off Post Cut Maintenance	1287	20	50	93	61	290	3
		<b>Area weighted total</b>				<b>142</b>	<b>75</b>	<b>152</b>	<b>102</b>	<b>527</b>



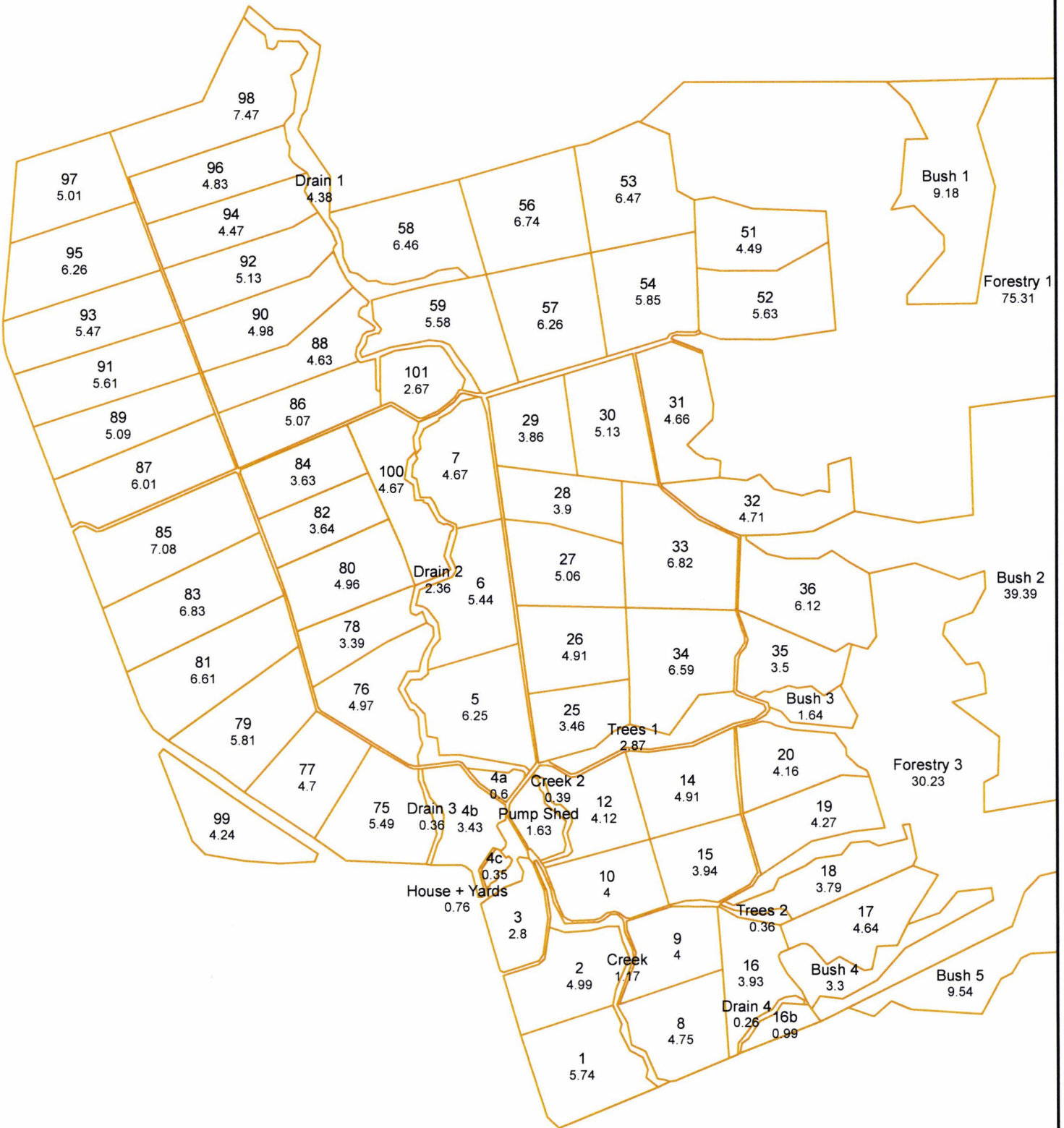
92	16/08/2017	4.4	RZR - AMM SE	124	44	-	-	12	-	-
	05/09/2017	4.9	UREA BULK	119	55	-	-	-	-	-
	21/11/2017	4.7	VW R/off Post Cut Maintenance	1356	22	53	98	65	305	3
	<b>Area weighted total</b>					<b>110</b>	<b>48</b>	<b>89</b>	<b>69</b>	<b>277</b>
93	16/08/2017	5.3	RZR - AMM SE	133	48	-	-	13	-	-
	05/09/2017	5.3	UREA BULK	133	61	-	-	-	-	-
	28/10/2017	5.3	Post Cust - Grazed mix	1062	36	27	65	33	256	5
	08/12/2017	5.3	VW R/off Post Cut Maintenance	1324	21	52	95	63	298	3
	21/02/2018	5.4	UREA BULK	109	50	-	-	-	-	-
	<b>Area weighted total</b>					<b>211</b>	<b>77</b>	<b>156</b>	<b>106</b>	<b>539</b>
94	16/08/2017	3.7	RZR - AMM SE	129	46	-	-	12	-	-
	05/09/2017	4.3	UREA BULK	130	60	-	-	-	-	-
	28/10/2017	4.3	Post Cust - Grazed mix	1002	34	26	61	31	241	4
	08/12/2017	4.2	VW R/off Post Cut Maintenance	1458	23	57	105	69	328	3
	<b>Area weighted total</b>					<b>149</b>	<b>78</b>	<b>157</b>	<b>105</b>	<b>538</b>
95	16/08/2017	6.1	RZR - AMM SE	121	43	-	-	12	-	-
	05/09/2017	6.1	UREA BULK	119	55	-	-	-	-	-
	28/10/2017	6	Post Cust - Grazed mix	977	33	25	60	31	235	4
	08/12/2017	6.1	VW R/off Post Cut Maintenance	1409	22	55	102	67	317	3
	21/02/2018	6.1	UREA BULK	100	46	-	-	-	-	-
	<b>Area weighted total</b>					<b>194</b>	<b>78</b>	<b>158</b>	<b>107</b>	<b>539</b>
96	16/08/2017	4.2	RZR - AMM SE	125	45	-	-	12	-	-
	05/09/2017	4.4	UREA BULK	122	56	-	-	-	-	-

	28/10/2017	4.7	Post Cust - Grazed mix	1019	34	26	62	32	245	4
	08/12/2017	4.6	VW R/off Post Cut Maintenance	1388	22	54	100	66	312	3
	<b>Area weighted total</b>				<b>145</b>	<b>77</b>	<b>156</b>	<b>105</b>	<b>537</b>	<b>7</b>
97	16/08/2017	4.7	RZR - AMM SE	135	48	-	-	13	-	-
	05/09/2017	4.8	UREA BULK	133	61	-	-	-	-	-
	28/10/2017	4.9	Post Cust - Grazed mix	1027	35	26	63	32	247	4
	08/12/2017	4.6	VW R/off Post Cut Maintenance	1407	22	55	101	67	317	3
	21/02/2018	4.9	UREA BULK	113	52	-	-	-	-	-
	<b>Area weighted total</b>				<b>210</b>	<b>76</b>	<b>155</b>	<b>105</b>	<b>533</b>	<b>7</b>
98	16/08/2017	6.6	RZR - AMM SE	144	51	-	-	14	-	-
	05/09/2017	6.8	UREA BULK	130	60	-	-	-	-	-
	28/10/2017	7.1	Post Cust - Grazed mix	1059	36	27	65	33	255	4
	08/12/2017	0.5	VW R/off Post Cut Maintenance	1728	28	67	125	82	389	3
	08/12/2017	7.1	VW R/off Post Cut Maintenance	1420	23	55	102	68	320	3
	21/02/2018	5.3	UREA BULK	111	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>193</b>	<b>83</b>	<b>167</b>	<b>114</b>	<b>573</b>	<b>7</b>
99	<b>Area weighted total</b>				<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Weighted average rate based on applied areas and rates for selected areas</b>					<b>109</b>	<b>38</b>	<b>62</b>	<b>51</b>	<b>254</b>	<b>3</b>

Note: Total and average rates assume product applications cover effective area of paddock(s) selected.

This is dependent on positional accuracy of paddock boundaries

\* The product that you have created, is missing nutrient values. This will affect any averages or totals in the Nutrient summary. Please go to the event concerned and add the nutrient values to the appropriate product.

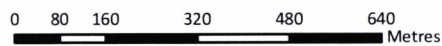


Paddocks

### My Ravensdown Smart Maps

www.myravensdown.co.nz  
 Note: Areas are in hectares  
 Copyright Ravensdown Ltd

## Merrivale



## Nutrient summary report

WORLDWIDE RUNOFF LTD - 60842387

Query range : 01 Jun 2017 to 31 May 2018

Name	Date	Area (ha)	Product	Rate (kg/ha or l/ha)	N kg/ha	P kg/ha	K kg/ha	S kg/ha	Ca kg/ha	Mg kg/ha
2A	05/09/2017	1.6	AMMO 36 BULK	138	49	-	-	13	-	-
	12/02/2018	1.9	UREA BULK	123	56	-	-	-	-	-
	<b>Area weighted total</b>				<b>87</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>-</b>	<b>-</b>
A1	05/09/2017	4	AMMO 36 BULK	139	50	-	-	13	-	-
	12/02/2018	4	UREA BULK	108	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>89</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>-</b>	<b>-</b>
B1	05/09/2017	6.2	AMMO 36 BULK	129	46	-	-	12	-	-
	24/11/2017	5.9	Post Cut mix to be cut again	355	58	10	54	12	22	7
	12/02/2018	6.4	UREA BULK	109	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>146</b>	<b>9</b>	<b>49</b>	<b>23</b>	<b>20</b>	<b>7</b>
B2	05/09/2017	7.7	AMMO 36 BULK	144	52	-	-	14	-	-
	10/01/2018	7.8	Merriburn Grazed Maintenance+N	887	43	23	-	29	240	5
	12/02/2018	8.2	UREA BULK	115	53	-	-	-	-	-
	<b>Area weighted total</b>				<b>132</b>	<b>21</b>	<b>-</b>	<b>37</b>	<b>211</b>	<b>5</b>
barn lane?	05/09/2017	1.1	AMMO 36 BULK	122	44	-	-	12	-	-
	12/02/2018	1.2	UREA BULK	105	48	-	-	-	-	-
	<b>Area weighted total</b>				<b>78</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>-</b>	<b>-</b>
C1	05/09/2017	5.9	AMMO 36 BULK	129	46	-	-	12	-	-
	24/11/2017	6	Post Cut mix to be cut again	352	57	10	53	12	21	7
	12/02/2018	6.2	UREA BULK	110	50	-	-	-	-	-

	<b>Area weighted total</b>				<b>146</b>	<b>9</b>	<b>50</b>	<b>22</b>	<b>20</b>	<b>7</b>
C2	05/09/2017	6.2	AMMO 36 BULK	137	49	-	-	13	-	-
	10/01/2018	6.1	Merriburn Grazed Maintenance+N	894	44	24	-	29	242	5
	12/02/2018	6.3	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>136</b>	<b>22</b>	<b>-</b>	<b>39</b>	<b>225</b>	<b>5</b>
C3	05/09/2017	3.7	AMMO 36 BULK	148	53	-	-	14	-	-
	08/12/2017	3.2	Post Cust - Grazed mix	1118	38	29	68	35	269	5
	<b>Area weighted total</b>				<b>67</b>	<b>20</b>	<b>47</b>	<b>35</b>	<b>184</b>	<b>3</b>
D1	05/09/2017	4	AMMO 36 BULK	133	48	-	-	13	-	-
	24/11/2017	4	Post Cut mix to be cut again	358	58	10	54	12	22	7
	12/02/2018	4.2	UREA BULK	114	53	-	-	-	-	-
	<b>Area weighted total</b>				<b>150</b>	<b>9</b>	<b>51</b>	<b>23</b>	<b>20</b>	<b>7</b>
D2	05/09/2017	4.5	AMMO 36 BULK	150	54	-	-	14	-	-
	24/11/2017	4.4	Merriburn Grazed Maintenance+N	932	45	25	-	30	252	6
	12/02/2018	4.7	UREA BULK	112	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>133</b>	<b>21</b>	<b>-</b>	<b>38</b>	<b>216</b>	<b>5</b>
D3	05/09/2017	2.5	AMMO 36 BULK	138	50	-	-	13	-	-
	<b>Area weighted total</b>				<b>30</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>-</b>
E1	05/09/2017	1	AMMO 36 BULK	135	48	-	-	13	-	-
	24/11/2017	0.8	Merriburn Grazed Maintenance+N	972	47	26	-	31	263	6
	12/02/2018	1.2	UREA BULK	120	55	-	-	-	-	-
	<b>Area weighted total</b>				<b>114</b>	<b>15</b>	<b>-</b>	<b>29</b>	<b>157</b>	<b>4</b>
E2	05/09/2017	2.1	AMMO 36 BULK	135	48	-	-	13	-	-
	24/11/2017	2.9	Merriburn Grazed Maintenance+N	992	48	26	-	32	269	6

	12/02/2018	3.3	UREA BULK	112	52	-	-	-	-	-
	<b>Area weighted total</b>				<b>113</b>	<b>21</b>	-	<b>33</b>	<b>212</b>	<b>5</b>
E3	05/09/2017	3.2	AMMO 36 BULK	141	51	-	-	14	-	-
	11/01/2018	1.1	Merriburn Grazed Maintenance+N	872	42	23	-	28	236	5
	12/02/2018	4	UREA BULK	118	54	-	-	-	-	-
	<b>Area weighted total</b>				<b>100</b>	<b>6</b>	-	<b>18</b>	<b>60</b>	<b>1</b>
F1	05/09/2017	3	AMMO 36 BULK	132	47	-	-	13	-	-
	24/11/2017	2.2	Merriburn Grazed Maintenance+N	924	45	24	-	30	250	6
	12/02/2018	3.7	UREA BULK	116	53	-	-	-	-	-
	<b>Area weighted total</b>				<b>98</b>	<b>12</b>	-	<b>23</b>	<b>122</b>	<b>3</b>
F2	05/09/2017	6.7	AMMO 36 BULK	144	52	-	-	14	-	-
	11/01/2018	7.3	Merriburn Grazed Maintenance+N	913	44	24	-	30	247	6
	12/02/2018	7.3	UREA BULK	108	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>134</b>	<b>23</b>	-	<b>40</b>	<b>236</b>	<b>5</b>
F3	05/09/2017	4.8	AMMO 36 BULK	140	50	-	-	13	-	-
	11/01/2018	5.2	Merriburn Grazed Maintenance+N	901	44	24	-	29	244	6
	12/02/2018	5.3	UREA BULK	113	52	-	-	-	-	-
	<b>Area weighted total</b>				<b>136</b>	<b>23</b>	-	<b>40</b>	<b>232</b>	<b>5</b>
F4	05/09/2017	0.7	AMMO 36 BULK	145	52	-	-	14	-	-
	<b>Area weighted total</b>				<b>9</b>	-	-	<b>2</b>	-	-
G1	05/09/2017	1.4	AMMO 36 BULK	120	43	-	-	11	-	-
	24/11/2017	1.4	Merriburn Grazed Maintenance+N	865	42	23	-	28	234	5
	21/02/2018	1.5	UREA BULK	102	47	-	-	-	-	-
	<b>Area weighted total</b>				<b>120</b>	<b>20</b>	-	<b>35</b>	<b>206</b>	<b>5</b>
G2	05/09/2017	5.6	AMMO 36 BULK	145	52	-	-	14	-	-

	24/11/2017	5.6	Merriburn Grazed Maintenance+N	956	47	25	-	31	259	6
	11/01/2018	6.6	Merriburn Grazed Maintenance+N	957	47	25	-	31	259	6
	12/02/2018	7.1	UREA BULK	114	53	-	-	-	-	-
	<b>Area weighted total</b>				<b>169</b>	<b>43</b>	<b>-</b>	<b>63</b>	<b>435</b>	<b>10</b>
G3	05/09/2017	5.8	AMMO 36 BULK	145	52	-	-	14	-	-
	<b>Area weighted total</b>				<b>31</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>-</b>
G4	<b>Area weighted total</b>				<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
H1	05/09/2017	0.6	AMMO 36 BULK	136	49	-	-	13	-	-
	24/11/2017	0.6	Merriburn Grazed Maintenance+N	936	46	25	-	30	253	6
	21/02/2018	0.7	UREA BULK	104	48	-	-	-	-	-
	<b>Area weighted total</b>				<b>113</b>	<b>19</b>	<b>-</b>	<b>34</b>	<b>194</b>	<b>4</b>
H2	16/08/2017	4.2	RZR - AMM SE	139	50	-	-	13	-	-
	24/11/2017	4.1	Post Cut mix to be cut again	358	58	10	54	12	22	7
	<b>Area weighted total</b>				<b>100</b>	<b>9</b>	<b>50</b>	<b>23</b>	<b>20</b>	<b>7</b>
H3	05/09/2017	3.2	AMMO 36 BULK	141	51	-	-	14	-	-
	24/11/2017	3.1	Merriburn Grazed Maintenance+N	930	45	25	-	30	252	6
	21/02/2018	3.3	UREA BULK	119	55	-	-	-	-	-
	<b>Area weighted total</b>				<b>124</b>	<b>20</b>	<b>-</b>	<b>35</b>	<b>200</b>	<b>5</b>
H4	16/08/2017	2.3	RZR - AMM SE	140	50	-	-	13	-	-
	24/11/2017	0.3	Post Cut mix to be cut again	374	61	10	57	12	23	8
	08/12/2017	2.1	Post Cust - Grazed mix	1137	38	29	70	36	274	5
	21/02/2018	2.1	UREA BULK	126	58	-	-	-	-	-
	<b>Area weighted total</b>				<b>119</b>	<b>23</b>	<b>58</b>	<b>39</b>	<b>210</b>	<b>4</b>

H5	05/09/2017	3.6	AMMO 36 BULK	140	50	-	-	13	-	-
	<b>Area weighted total</b>				<b>28</b>	-	-	<b>7</b>	-	-
H6	<b>Area weighted total</b>				-	-	-	-	-	-
R1	05/09/2017	6.2	AMMO 36 BULK	138	49	-	-	13	-	-
	06/12/2017	6.6	DAP Boron/ Potash and Slugbait	399	46	52	56	3	-	1
	<b>Area weighted total</b>				<b>87</b>	<b>49</b>	<b>53</b>	<b>14</b>	-	<b>1</b>
R10	05/09/2017	4.2	AMMO 36 BULK	134	48	-	-	13	-	-
	29/01/2018	3.9	VW R/off Post Cut Maintenance	1389	22	54	100	66	313	3
	12/02/2018	4.3	UREA BULK	109	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>99</b>	<b>41</b>	<b>77</b>	<b>61</b>	<b>239</b>	<b>2</b>
R11	05/09/2017	3.6	AMMO 36 BULK	137	49	-	-	13	-	-
	24/11/2017	3.6	Post Cut mix to be cut again	361	59	10	55	12	22	7
	12/02/2018	3.7	UREA BULK	122	56	-	-	-	-	-
	<b>Area weighted total</b>				<b>155</b>	<b>9</b>	<b>52</b>	<b>24</b>	<b>21</b>	<b>7</b>
R12	05/09/2017	8.1	AMMO 36 BULK	135	48	-	-	13	-	-
	19/10/2017	0.1	TZT - AGL SUP	155	-	7	-	9	44	-
	17/11/2017	0.1	GERMINATION MIX	612	32	44	27	54	98	-
	24/11/2017	8.3	Post Cut mix to be cut again	382	62	10	58	13	23	8
	12/02/2018	8.8	UREA BULK	111	51	-	-	-	-	-
	14/03/2018	0.2	UREA	95	44	-	-	-	-	-
	<b>Area weighted total</b>				<b>138</b>	<b>10</b>	<b>49</b>	<b>22</b>	<b>22</b>	<b>7</b>
R13	19/10/2017	7.1	TZT - AGL SUP	171	-	8	-	9	48	-
	17/11/2017	7.6	GERMINATION MIX	731	38	52	32	64	117	-
	14/03/2018	7.8	UREA	113	52	-	-	-	-	-
	<b>Area weighted total</b>				<b>79</b>	<b>52</b>	<b>28</b>	<b>63</b>	<b>139</b>	-
R14	16/08/2017	6.4	RZR - AMM SE	134	48	-	-	13	-	-



	12/02/2018	6.5	UREA BULK	111	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>93</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>-</b>	<b>-</b>
R15	16/08/2017	6	RZR - AMM SE	135	48	-	-	13	-	-
	05/09/2017	2.1	AMMO 36 BULK	122	44	-	-	12	-	-
	24/11/2017	8	Post Cut mix to be cut again	361	59	10	55	12	22	7
	12/02/2018	8.2	UREA BULK	111	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>142</b>	<b>9</b>	<b>49</b>	<b>22</b>	<b>20</b>	<b>7</b>
R16	05/09/2017	3.2	AMMO 36 BULK	133	48	-	-	13	-	-
	08/12/2017	3.4	Post Cust - Grazed mix	1078	36	28	66	34	260	5
	10/01/2018	3.2	Merriburn Grazed Maintenace+N	1012	49	27	-	33	274	6
	12/02/2018	3.4	UREA BULK	109	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>158</b>	<b>47</b>	<b>58</b>	<b>68</b>	<b>457</b>	<b>9</b>
R17	16/08/2017	2.8	RZR - AMM SE	132	47	-	-	13	-	-
	08/12/2017	3.2	Post Cust - Grazed mix	1051	36	27	64	33	253	4
	10/01/2018	3.1	Merriburn Grazed Maintenace+N	1029	50	27	-	33	278	6
	12/02/2018	3.3	UREA BULK	112	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>162</b>	<b>48</b>	<b>58</b>	<b>69</b>	<b>474</b>	<b>10</b>
R18	16/08/2017	2.1	RZR - AMM SE	141	50	-	-	14	-	-
	05/09/2017	1.2	AMMO 36 BULK	121	43	-	-	12	-	-
	04/12/2017	3.4	DAP Boron/ Potash and Slugbait	418	48	55	59	3	-	1
	<b>Area weighted total</b>				<b>82</b>	<b>48</b>	<b>51</b>	<b>13</b>	<b>-</b>	<b>1</b>
R19	16/08/2017	3.1	RZR - AMM SE	130	46	-	-	12	-	-
	04/12/2017	3.4	DAP Boron/ Potash and Slugbait	432	50	57	61	3	-	2

	<b>Area weighted total</b>				<b>82</b>	<b>50</b>	<b>54</b>	<b>12</b>	<b>-</b>	<b>1</b>
R2	05/09/2017	3.1	AMMO 36 BULK	152	54	-	-	15	-	-
	24/11/2017	2.9	Merriburn Grazed Maintenance+N	956	47	25	-	31	259	6
	12/02/2018	3.2	UREA BULK	120	55	-	-	-	-	-
	<b>Area weighted total</b>				<b>133</b>	<b>20</b>	<b>-</b>	<b>37</b>	<b>209</b>	<b>5</b>
R20	16/08/2017	4.4	RZR - AMM SE	131	47	-	-	12	-	-
	04/12/2017	4.6	DAP Boron/ Potash and Slugbait	396	46	52	56	3	-	1
	<b>Area weighted total</b>				<b>88</b>	<b>51</b>	<b>54</b>	<b>14</b>	<b>-</b>	<b>1</b>
R21	16/08/2017	4.6	RZR - AMM SE	131	47	-	-	13	-	-
	04/12/2017	5.3	DAP Boron/ Potash and Slugbait	396	46	52	56	3	-	1
	<b>Area weighted total</b>				<b>79</b>	<b>47</b>	<b>51</b>	<b>12</b>	<b>-</b>	<b>1</b>
R3	16/08/2017	2.1	RZR - AMM SE	157	56	-	-	15	-	-
	24/11/2017	3.4	Merriburn Grazed Maintenance+N	960	47	25	-	31	260	6
	21/02/2018	3.3	UREA BULK	111	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>123</b>	<b>24</b>	<b>-</b>	<b>38</b>	<b>243</b>	<b>5</b>
R4	05/09/2017	4.8	AMMO 36 BULK	130	46	-	-	12	-	-
	24/11/2017	4.7	Merriburn Grazed Maintenance+N	909	44	24	-	29	246	6
	12/02/2018	5	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>127</b>	<b>21</b>	<b>-</b>	<b>37</b>	<b>215</b>	<b>5</b>
R5	19/10/2017	2.6	TZT - AGL SUP	166	-	7	-	9	47	-
	19/10/2017	4.7	TZT - AGL SUP	338	-	15	-	19	95	-
	17/11/2017	4.7	GERMINATION MIX	719	37	52	32	63	115	-
	12/02/2018	5	UREA BULK	121	56	-	-	-	-	-
	<b>Area weighted total</b>				<b>86</b>	<b>63</b>	<b>28</b>	<b>77</b>	<b>209</b>	<b>-</b>
R6	05/09/2017	4.2	AMMO 36 BULK	138	49	-	-	13	-	-

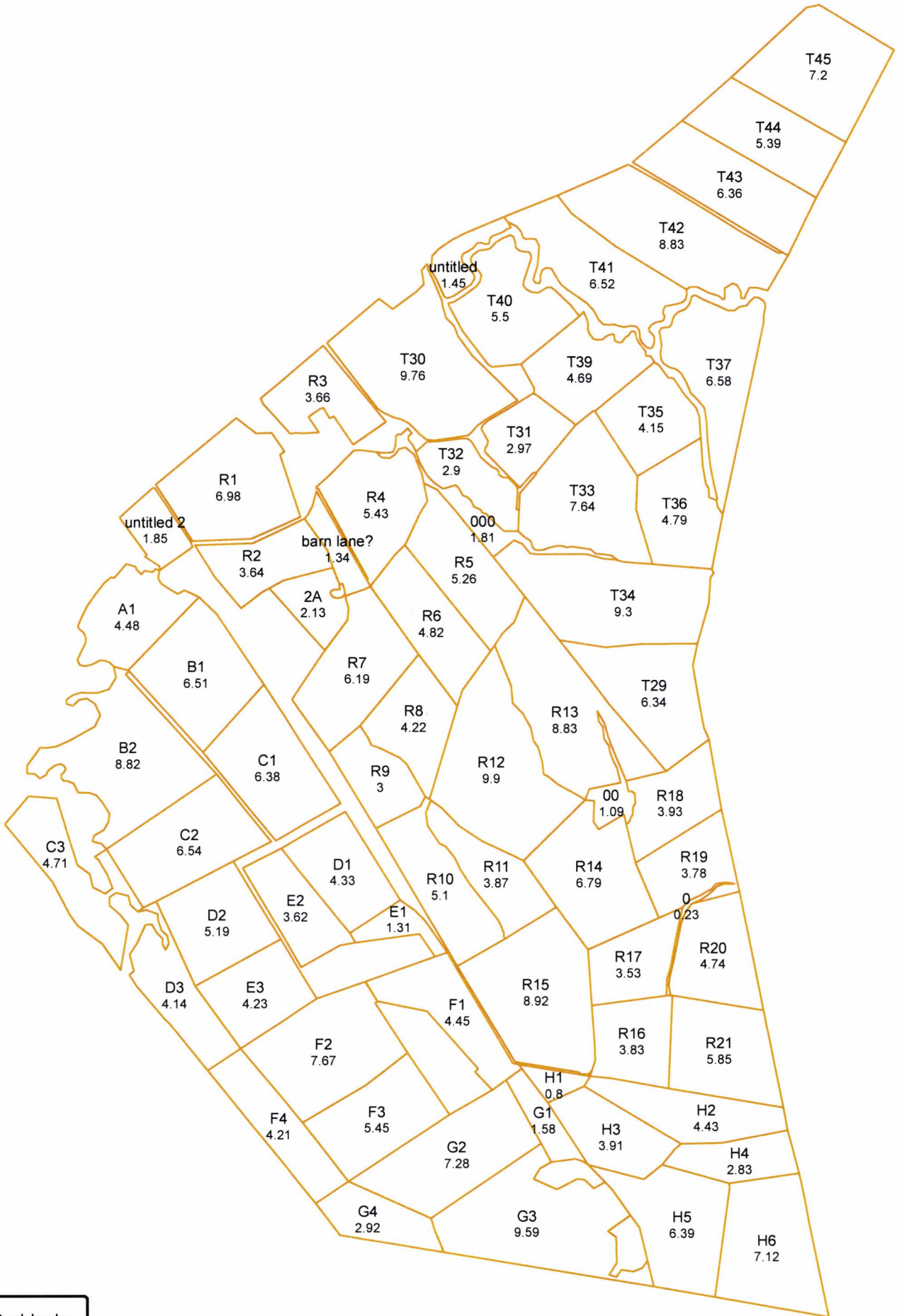
	12/02/2018	4.6	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>92</b>	-	-	<b>12</b>	-	-
R7	05/09/2017	4.2	AMMO 36 BULK	133	48	-	-	13	-	-
	12/02/2018	4.3	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>68</b>	-	-	<b>9</b>	-	-
R8	05/09/2017	3.6	AMMO 36 BULK	135	48	-	-	13	-	-
	24/11/2017	3.6	Merriburn Grazed Maintenance+N	964	47	26	-	31	261	6
	12/02/2018	4	UREA BULK	115	53	-	-	-	-	-
	<b>Area weighted total</b>				<b>131</b>	<b>22</b>	-	<b>37</b>	<b>222</b>	<b>5</b>
R9	05/09/2017	2.3	AMMO 36 BULK	139	50	-	-	13	-	-
	08/12/2017	2.4	Post Cust - Grazed mix	1128	38	29	69	35	272	5
	12/02/2018	2.7	UREA BULK	118	54	-	-	-	-	-
	<b>Area weighted total</b>				<b>116</b>	<b>23</b>	<b>56</b>	<b>39</b>	<b>219</b>	<b>4</b>
T29	05/09/2017	4.7	AMMO 36 BULK	140	50	-	-	13	-	-
	12/02/2018	5.9	UREA BULK	119	55	-	-	-	-	-
	<b>Area weighted total</b>				<b>88</b>	-	-	<b>10</b>	-	-
T30	16/08/2017	4.5	RZR - AMM SE	145	52	-	-	14	-	-
	24/11/2017	4.6	Merriburn Grazed Maintenance+N	919	45	24	-	30	249	6
	06/12/2017	3.9	DAP Boron/ Potash and Slugbait	413	48	54	58	3	-	1
	<b>Area weighted total</b>				<b>64</b>	<b>33</b>	<b>23</b>	<b>22</b>	<b>118</b>	<b>3</b>
T31	19/10/2017	2.8	TZT - AGL SUP	311	-	14	-	17	87	-
	17/11/2017	2.9	GERMINATION MIX	689	36	49	31	60	110	-
	29/01/2018	2.8	UREA BULK	110	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>83</b>	<b>62</b>	<b>30</b>	<b>76</b>	<b>191</b>	-
T32	19/10/2017	2.6	TZT - AGL SUP	322	-	14	-	18	90	-
	17/11/2017	2.6	GERMINATION MIX	730	38	52	32	64	117	-

	29/01/2018	2.4	UREA BULK	112	52	-	-	-	-	-
	<b>Area weighted total</b>				<b>77</b>	<b>59</b>	<b>28</b>	<b>72</b>	<b>183</b>	-
T33	19/10/2017	7.3	TZT - AGL SUP	163	-	7	-	9	46	-
	17/11/2017	7.4	GERMINATION MIX	704	37	51	31	62	112	-
	29/01/2018	7.2	UREA BULK	109	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>82</b>	<b>56</b>	<b>30</b>	<b>68</b>	<b>152</b>	-
T34	19/10/2017	8	TZT - AGL SUP	160	-	7	-	9	45	-
	17/11/2017	7.8	GERMINATION MIX	684	35	49	30	60	109	-
	14/03/2018	8.2	UREA	106	49	-	-	-	-	-
	<b>Area weighted total</b>				<b>73</b>	<b>48</b>	<b>26</b>	<b>58</b>	<b>130</b>	-
T35	19/10/2017	3.9	TZT - AGL SUP	317	-	14	-	17	89	-
	17/11/2017	4	GERMINATION MIX	683	35	49	30	60	109	-
	29/01/2018	3.7	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>79</b>	<b>60</b>	<b>29</b>	<b>74</b>	<b>188</b>	-
T36	05/09/2017	4.7	AMMO 36 BULK	146	52	-	-	14	-	-
	12/02/2018	4.7	UREA BULK	119	55	-	-	-	-	-
	<b>Area weighted total</b>				<b>105</b>	-	-	<b>14</b>	-	-
T37	05/09/2017	6.1	AMMO 36 BULK	145	52	-	-	14	-	-
	24/11/2017	6.2	Merriburn Grazed Maintenance+N	1007	49	27	-	33	272	6
	<b>Area weighted total</b>				<b>94</b>	<b>25</b>	-	<b>43</b>	<b>255</b>	<b>6</b>
T39	19/10/2017	4.1	TZT - AGL SUP	335	-	15	-	18	94	-
	17/11/2017	4	GERMINATION MIX	693	36	50	31	61	111	-
	29/01/2018	3.8	UREA BULK	111	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>71</b>	<b>55</b>	<b>26</b>	<b>67</b>	<b>174</b>	-
T40	19/10/2017	5.3	TZT - AGL SUP	321	-	14	-	18	90	-
	17/11/2017	5	GERMINATION MIX	704	37	51	31	62	112	-
	29/01/2018	5	UREA BULK	110	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>80</b>	<b>60</b>	<b>28</b>	<b>73</b>	<b>190</b>	-

T41	16/08/2017	5.8	RZR - AMM SE	138	49	-	-	13	-	-
	06/12/2017	5.8	DAP Boron/ Potash and Slugbait	400	46	52	56	3	-	1
	<b>Area weighted total</b>				<b>85</b>	<b>46</b>	<b>50</b>	<b>14</b>	<b>-</b>	<b>1</b>
T42	16/08/2017	8.5	RZR - AMM SE	136	49	-	-	13	-	-
	17/11/2017	8.3	UREA BULK	110	50	-	-	-	-	-
	08/12/2017	8.2	Post Cust - Grazed mix	1088	37	28	67	34	262	5
	12/02/2018	8.5	UREA BULK	111	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>178</b>	<b>26</b>	<b>62</b>	<b>44</b>	<b>245</b>	<b>4</b>
T43	16/08/2017	6.1	RZR - AMM SE	134	48	-	-	13	-	-
	17/11/2017	6.3	UREA BULK	111	51	-	-	-	-	-
	08/12/2017	6.2	Post Cust - Grazed mix	1019	34	26	62	32	245	4
	21/02/2018	6.2	UREA BULK	111	51	-	-	-	-	-
	<b>Area weighted total</b>				<b>179</b>	<b>25</b>	<b>60</b>	<b>43</b>	<b>238</b>	<b>4</b>
T44	16/08/2017	4.9	RZR - AMM SE	127	45	-	-	12	-	-
	17/11/2017	5.2	UREA BULK	99	46	-	-	-	-	-
	08/12/2017	5.2	Post Cust - Grazed mix	1039	35	27	64	33	250	4
	21/02/2018	5.1	UREA BULK	97	45	-	-	-	-	-
	<b>Area weighted total</b>				<b>161</b>	<b>26</b>	<b>61</b>	<b>42</b>	<b>240</b>	<b>4</b>
T45	16/08/2017	6.9	RZR - AMM SE	131	47	-	-	12	-	-
	17/11/2017	6.8	UREA BULK	110	50	-	-	-	-	-
	08/12/2017	6.5	Post Cust - Grazed mix	1048	35	27	64	33	252	4
	21/02/2018	6.9	UREA BULK	108	50	-	-	-	-	-
	<b>Area weighted total</b>				<b>171</b>	<b>24</b>	<b>58</b>	<b>41</b>	<b>227</b>	<b>4</b>
untitled	16/08/2017	1	RZR - AMM SE	155	55	-	-	15	-	-

	06/12/2017	0.9	DAP Boron/ Potash and Slugbait	400	46	52	56	3	-	1
	<b>Area weighted total</b>				<b>67</b>	<b>33</b>	<b>35</b>	<b>12</b>	<b>-</b>	<b>1</b>
untitled 2	24/11/2017	1.6	Merriburn Grazed Maintenance+N	999	49	26	-	32	270	6
	<b>Area weighted total</b>				<b>41</b>	<b>22</b>	<b>-</b>	<b>27</b>	<b>227</b>	<b>5</b>
<b>Weighted average rate based on applied areas and rates for selected areas</b>					<b>103</b>	<b>25</b>	<b>25</b>	<b>33</b>	<b>125</b>	<b>3</b>

Note: Total and average rates assume product applications cover effective area of paddock(s) selected.  
This is dependent on positional accuracy of paddock boundaries



Paddocks

**My Ravensdown Smart Maps**

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 Note: Areas are in hectares  
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**Merriburn**

