Qlabs - "soils for life"

Q Labs
4 Victoria st
Waipawa
4210

Tel: 06 857733
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A/h: 021 783 539
Email: info@qlabs.co.nz

Client: Farm Ltd
Feed Type: Pasture & Grazing Plants
Animal Type: Cattle
Consultant: Malcolm McCall

Sample Name: East 308-
Lab No: 68016
Date: 17-11-16

Address: -

Major and important components

	Unit	DM basis	optimum (DM)	As fed	optimum (As Fed)
Dry Matter 'DM'	%			**16.9**	More than 30 % DM required
Metabolisable energy (ME)	Mcal/Kg	**11.7**		**2.0**	
Total Carbohydrates* (CHO)	%	**62.5**	103	11	
Crude Protein* %	%	**25.0**	17	**4.2**	
Fat	%	**4.7**	3 to 5	**0.8**	
Total digestible nutrients (TDN)*	%	**72.8**	68 to 72		
Neutral detergent fibre (NDF)	%	**42.9**	34	**7**	
Acid detergent fibre (ADF)	%	**24.7**	less than 21	**4.2**	
Ash	%	**7.7**	less than 5	**1.3**	
Nitrate Nitrogen %	%	**0.01**	less than 0.1		

Projected maximum intake of feed

On a DM basis	
Percent of body weight	2.8
Kg maximum intake for an animal of 50kg	1.4
Kg maximum intake for an animal of 500kg	17
On an As Fed basis	
Percent of body weight	16.5
Kg maximum intake for an animal of 50kg	8.3
Kg maximum intake for an animal of 500kg	99

Fibre and Carbohydrates	Unit	DM Basis	optimum (DM)
DDM	%	**69.7**	
Crude Fibre	%	**23.3**	15 to 20
Digestible Crude Fibre	%	**14.0**	10.65
Nitrogen Free extract NFE	%	**39.2**	
Digestible NFE	%	**31.4**	
NFC Non Fibre Carb	%	**19.64**	**35**

Protein	Unit	DM Basis	optimum (DM)
Actual Protein %	%	**24.6**	
Digestible Protein	%	**18.9**	10.64
Metabolisable Protein	%	4.9	
NPN (Non-Protein-Nitrogen	%	**0.06**	

Energy	Unit	DM Basis	optimum (DM)
Relative Feed Value	RFV	**151**	
Digestible energy	Mcal/kg	**3.18**	
NE.maintenance	Mcal/kg	**2.13**	
NE.Lactation	Mcal/kg	**1.90**	
NE.gain	Mcal/kg	**1.44**	

Electrolytes	Unit	DM Basis	optimum (DM)
Potassium	%	**1.50**	8.04
Calcium	%	**0.50**	4.02
Phosphorus	%	**0.58**	2.68
Magnesium	%	**0.19**	2.01
Sodium	%	**1.34**	1.34
Sulphur	%	**0.35**	0.15

Trace elements	Unit	DM Basis	optimum (DM)
Iron	ppm	**124**	50 to 100
Manganese	ppm	**108**	40 to 60
Zinc	ppm	**25**	20 to 40
Copper	ppm	**9**	4 to 10

Nitrogen Utilisation	Unit	result	optimum
Urea Fermentation Potential		27.1	more than 0
Milk Urea Nitrogen	mg/dL	28	16
Nitrogen Utilisation Efficiency	%	17	26
Urinary Nitrogen	g/day	425	257

- Electrolytes, Trace elements, S, P, N and NO_3 were subcontracted to Hills Laboratories.
- NDF, ADF and Crude Fibre were analysed gravimetrically using 'source'
-Crude fat was analysed on a sohxlet set 'source'
-Dry matter reported on 20 hour drying at 60°C, followed by 4 hours at 105°C. Ash reported on 3 hours in the furnace at 550°C
- *components marked with a star are calculated values; utilising NRC guidleines and other sources.

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Client: Farm Ltd
Feed Type: Pasture & Grazing Plants
Animal Type: Cattle
Consultant: Malcolm McCall

Sample Name: West
Lab No: 68116
Date: 17-11-16

Address: -
-
-

Major and important components

		Unit	DM basis	optimum (DM)	As fed	optimum (As Fed)
Dry Matter	**'DM'**	%			**16.6**	More than 30 % DM required
Metabolisable energy (ME)		Mcal/Kg	**11.5**		**1.9**	
Total Carbohydrates* (CHO)		%	**66.1**	87	11	
Crude Protein* %		%	**21.3**	17	**3.5**	
Fat		%	**4.2**	3 to 5	**0.7**	
Total digestible nutrients (TDN)*		%	**71.5**	68 to 72		
Neutral detergent fibre (NDF)		%	**42.7**	34	**7**	
Acid detergent fibre (ADF)		%	**24.4**	less than 21	**4.1**	
Ash		%	**8.4**	less than 5	**1.4**	
Nitrate Nitrogen %		%	**0.01**	less than 0.1		

Projected maximum intake of feed	
On a DM basis	
Percent of body weight	2.8
Kg maximum intake for an animal of 50kg	1.4
Kg maximum intake for an animal of 500kg	17
On an As Fed basis	
Percent of body weight	16.9
Kg maximum intake for an animal of 50kg	8.5
Kg maximum intake for an animal of 500kg	101

Fibre and Carbohydrates	Unit	DM Basis	optimum (DM)
DDM	%	**69.9**	
Crude Fibre	%	**22.5**	15 to 20
Digestible Crude Fibre	%	**13.5**	10.65
Nitrogen Free extract NFE	%	**43.6**	
Digestible NFE	%	**34.9**	
NFC Non Fibre Carb	%	**23.41**	**35**

Protein	Unit	DM Basis	optimum (DM)
Actual Protein %	%	**20.9**	
Digestible Protein	%	**15.5**	10.64
Metabolisable Protein	%	4.8	
NPN (Non-Protein-Nitrogen	%	**0.06**	

Energy	Unit	DM Basis	optimum (DM)
Relative Feed Value	RFV	**152**	
Digestible energy	Mcal/kg	**3.12**	
NE.maintenance	Mcal/kg	**2.09**	
NE.Lactation	Mcal/kg	**1.85**	
NE.gain	Mcal/kg	**1.40**	

Electrolytes	Unit	DM Basis	optimum (DM)
Potassium	%	**2.50**	4.87
Calcium	%	**0.50**	2.44
Phosphorus	%	**0.40**	1.62
Magnesium	%	**0.21**	1.22
Sodium	%	**0.81**	0.81
Sulphur	%	**0.22**	0.15

Trace elements	Unit	DM Basis	optimum (DM)
Iron	ppm	**111**	50 to 100
Manganese	ppm	**78**	40 to 60
Zinc	ppm	**25**	20 to 40
Copper	ppm	**7**	4 to 10

Nitrogen Utilisation	Unit	result	optimum
Urea Fermentation Potential		26.6	more than 0
Milk Urea Nitrogen	mg/dL	22	16
Nitrogen Utilisation Efficiency	%	22	26
Urinary Nitrogen	g/day	335	257

- Electrolytes, Trace elements, S, P, N and NO_3 were subcontracted to Hills Laboratories.
- NDF, ADF and Crude Fibre were analysed gravimetrically using 'source'
-Crude fat was analysed on a sohxlet set 'source'
-Dry matter reported on 20 hour drying at 60°C, followed by 4 hours at 105°C. Ash reported on 3 hours in the furnace at 550°C
- *components marked with a star are calculated values; utilising NRC guidleines and other sources.

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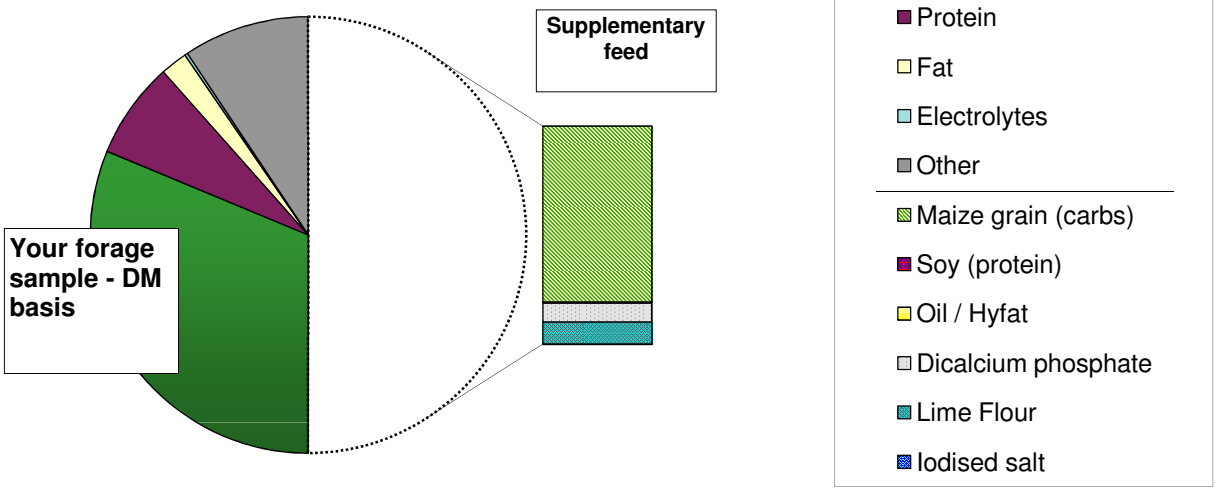
Date:	17-11-16
Client:	Farm Ltd
Sample Name:	East
Lab No:	308-68016



Supplementary feed based on feed results

(kg/tonne of lick)						grams to add to 1kg of Dry Matter	
4	kgs of HyFat or vegetable oil					3 grams	
	kgs of Soybean Meal					grams	
763	kgs of Kibbled or crushed Maize					492 grams	
81	kgs of Di Calcium Phosphate *(See note below)					53 grams	
96	kgs of Lime Flour					62 grams	
56	kgs of Magnesium Oxide (Causemag)					36 grams	
	kgs of Iodized Salt					grams	
1000	**kg**			Total		**645** grams to add to 1kg of DM	
						109 grams to add to 1kg As Fed	

* Change Dicalcium phosphate to Monosodium phosphate when feeding precalving cows 3 weeks prior to calving until calving begins

Due to the fact that Qlabs has no control in the mixing of these licks, nor the feeding, Qlabs cannot guarantee results. No responsibility is intended or implied. Should you experience any problems, please contact Qlabs immediately.

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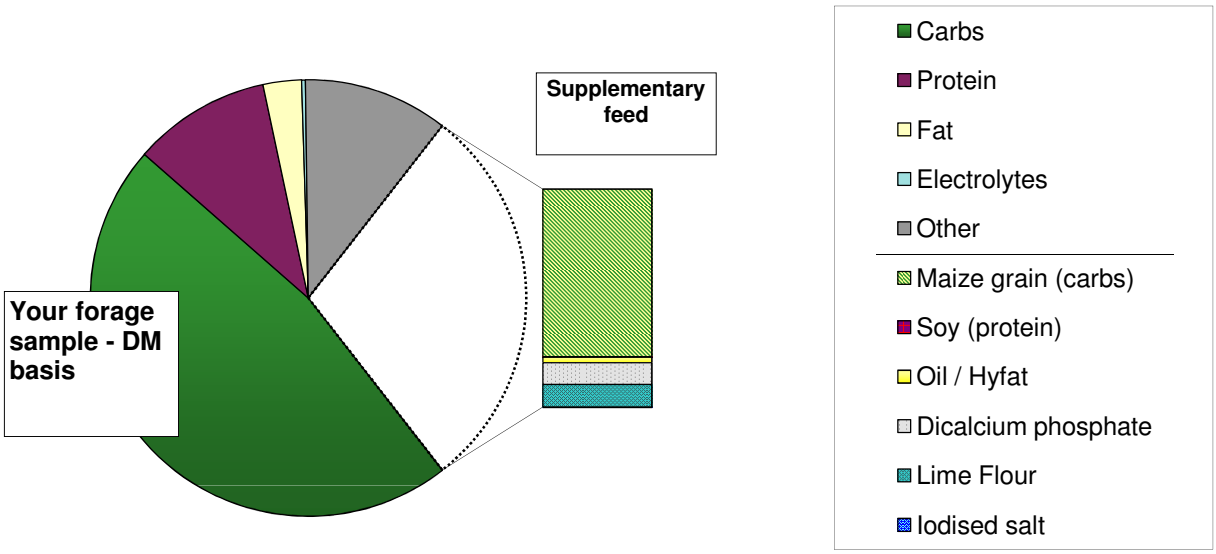
Date:	17-11-16
Client:	Farm Ltd
Sample Name:	West
Lab No:	68116



Supplementary feed based on feed results

(kg/tonne of lick)						grams to add to 1kg of Dry Matter	
24	kgs of HyFat or vegetable oil					8 grams	
	kgs of Soybean Meal					grams	
723	kgs of Kibbled or crushed Maize					236 grams	
94	kgs of Di Calcium Phosphate *(See note below)					31 grams	
98	kgs of Lime Flour					32 grams	
62	kgs of Magnesium Oxide (Causemag)					20 grams	
	kgs of Iodized Salt					grams	
1000	**kg**			Total		**327** grams to add to 1kg of DM	
						54 grams to add to 1kg As Fed	

* Change Dicalcium phosphate to Monosodium phosphate when feeding precalving cows 3 weeks prior to calving until calving begins

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