



Hill Laboratories

TRIED, TESTED AND TRUSTED

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ANALYSIS REPORT

Page 1 of 3

Client:	Scott Simpson Contracting Limited	Lab No:	1846860	shpv1
Address:	58 Teaneraki Settlement Road RD 5D Oamaru 9492	Date Received:	21-Sep-2017	
		Date Reported:	22-Sep-2017	
		Quote No:		
		Order No:		
		Client Reference:	Alma	
		Add. Client Ref:	PC - Simon Thorp	
Phone:	03 432 4207	Submitted By:	Scott Simpson Contracting Limited	

Sample Name: Alma

Lab Number: 1846860.1

Sample Type: Mixed Pasture (P1)

Analysis		Level Found	Medium Range	Low	Medium	High
Nitrogen	%	1.8	4.0 - 5.0			
Nitrogen	%DM	1.9				
Dry Matter	%	52.8	12.0 - 30.0			
Crude Protein	%DM	11.7	20.0 - 30.0			
Digestibility of Organic Matter in Dry Matter (DOMD)	%	68.2	65.0 - 80.0			
Metabolisable Energy	MJ/kgDM	10.9	9.0 - 12.0			

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.



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Analyst's Comments

Sample 1 Comment:

Typical DM% values range from:
12-15% (spring); 15-20% (summer); 20-30% (summer dry); 13-18% (aut/winter); above 30% (wilted herbage for silage/balage).

SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Plant			
Test	Method Description	Default Detection Limit	Sample No
Sample Registration	Samples were registered according to instructions received.	-	1
Plant Prep (Dry & Grind)	Oven dried at 62°C overnight and ground to pass through a 1.0mm screen. Analytical results are reported from this sample fraction and are not corrected for residual moisture (typically 5%), unless units denoted as %DM. Analysed at 25 Te Aroha Street, Hamilton.	-	1
Nitrogen	Either estimated by NIR (calibration based on N by Dumas combustion) or Dumas combustion. Reported on DM basis. Analysed at 1 Clyde Street, Hamilton.	0.1 %DM	1
Nitrogen	Estimated by NIR, calibration based on N by Dumas combustion. Result not corrected for residual moisture (typically 5%). Analysed at 1 Clyde Street, Hamilton.	0.1 %	1
Dry Matter	Weight Loss on drying at 105°C for a minimum of 24 hours. (Silage corrected for loss of volatiles) Analysed at Hill Laboratories - 25 Te Aroha Street, Hamilton.	0.5 %	1
Crude Protein	Nitrogen multiplied by 6.25. Reported on DM basis. Analysed at 1 Clyde Street, Hamilton.	0.5 %DM	1
Ash	Estimated by NIR, calibration based on weight loss after ashing at 600°C for two hours. Reported on DM basis. Analysed at 1 Clyde Street, Hamilton.	0.5 %	1
Organic Matter Digestibility (in-vitro)	Organic Matter Digestibility (OMD) estimated by NIR, calibration based on AFIA (Australian Fodder Industry Association) Pepsin-Cellulase procedure. Analysed at 1 Clyde Street, Hamilton.	1.0 %	1
Digestibility of Organic Matter in Dry Matter (DOMD)	Calculated from Organic Matter Digestibility (OMD) using AFIA (Australian Fodder Industry Association) Standard Equation. Analysed at 1 Clyde Street, Hamilton.	0.5 %	1
Metabolisable Energy	Calculated from Dry Organic Matter Digestibility (DOMD) using AFRC and Lincoln University standard formulae. Analysed at 1 Clyde Street, Hamilton.	0.5 MJ/kgDM	1

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

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Fiona Everitt
Operations Support - Agriculture