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## **Certificate of Analysis**

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HSDMASP-3v1

Client: Egmont Honey Limited

Contact: Nick Walker

C/- Egmont Honey Limited

21 Connett Road

Bell Block

New Plymouth 4312

Lab No: **Date Received: Date Reported:**  2610489 13-May-2021

13-May-2021

**Quote No:** Order No:

105847

275

Client Reference: Submitted By:

Ashish Rikhi

Manuka Honey Analysis								
		Dihydroxyacetone (DHA)	Methylglyoxal (MGO)	Non Peroxide Activity (NPA)*	5- Hydroxymethylfurfural (HMF)			
Sample Name:	Lab Number	mg/kg	mg/kg	% Phenol Equivalent	mg/kg			
21EG-548-2	2610489.3	982	481	14.4	18.4			

Manuka Honey Analysis					
		Leptosperin			
Sample Name:	Lab Number	mg/kg			
21EG-548-2	2610489.3	400			

Supplementary Report: This report is a supplement to an earlier report. It may represent a subset of the requested tests.

## 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 simple 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. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Laboratories, 28 Duke Street, Frankton, Hamilton 3204

Sample Type: Honey							
Test	Method Description	Default Detection Limit	Sample No				
Individual Tests							
3-in-1 Honey Method	Aqueous extraction, derivatisation. Analysis by uHPLC / UV-Vis (dihydroxyacetone, 5-hydroxymethylfurfural, methylglyoxal). Inhouse.	-	3				
Leptosperin	Aqueous extraction, dilution, analysis by LC-MS/MS.	15 mg/kg	3				
Non Peroxide Activity (NPA)*	NPA is calculated from methylglyoxal using a correlation curve based on published data for NPA and the primary active ingredient, methylglyoxal. (1,2). (1) Isolation by HPLC and characterisation of the bioactive fraction of New Zealand manuka (Leptospermum scoparium) honey. C. J. Adams, et al. Carbohydrate Research 343 (2008) 651-659. (2) Corrigendum to "Isolation by HPLC and characterization of the bioactive fraction of New Zealand manuka (Leptospermum scoparium) honey" [Carbohydr. Res. 343 (2008) 651]. C. J. Adams, et al. Carbohydrate Research 344 (2009) 2609.	1.0 % Phenol Equivalent	3				

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

Dates of testing are available on request. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

Bruce Morris PhD Senior Technologist - Food & Bioanalytical





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