

## Certificate of Analysis

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<b>Client:</b>	Egmont Honey Limited	<b>Lab No:</b>	3462207	HSDMASP-1v1
<b>Contact:</b>	Nick Walker	<b>Date Received:</b>	09-Feb-2024	
	C/- Egmont Honey Limited	<b>Date Reported:</b>	09-Feb-2024	
	21 Connett Road	<b>Quote No:</b>	105847	
	Bell Block	<b>Order No:</b>	24EG-870-3	
	New Plymouth 4312	<b>Client Reference:</b>	275	
		<b>Submitted By:</b>	Nick Walker	

### Manuka Honey Analysis

Sample Name:	Lab Number	Dihydroxyacetone (DHA) mg/kg	Methylglyoxal (MGO) mg/kg	Non Peroxide Activity (NPA)* % Phenol Equivalent	5-Hydroxymethylfurfural (HMF) mg/kg
24EG-870-3	3462207.1	195	88	5.2	10.5

### Manuka Honey Analysis

Sample Name:	Lab Number	Leptosperin mg/kg
24EG-870-3	3462207.1	163

**Manuka Honey Analysis Report:** This report 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 Labs, 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). In-house.	1.0 - 10 mg/kg	1
Leptosperin	Aqueous extraction, dilution, analysis by LC-MS/MS.	15 mg/kg	1
Non Peroxide Activity (NPA)*	NPA is calculated from methylglyoxal using an industry accepted correlation curve based on published data <sup>1,2</sup> for NPA and the primary active ingredient, methylglyoxal. <sup>1</sup> 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. <sup>2</sup> 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	1

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

Testing was completed on 09-Feb-2024. 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.

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Helen McGowan BSc (Tech)  
Operations Support - Food & Bioanalytical



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