




Certificate of Analysis

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Client: Contact:		Lab No: 2186047 SDSPv7
		Date Received: 31-May-2019 Date Reported: 07-Jun-2019 Quote No: Order No: Client Reference: Submitted By:

Analysis Results

Sample Name:	Lab Number	Dihydroxyacetone (DHA) mg/kg	5-hydroxymethylfurfural (HMF) mg/kg	Methylglyoxal (MGO) mg/kg	Non Peroxide Activity (NPA)* % Phenol Equivalent
19JN8	2186047.1	1,300	29	806	19.7

Analyst's Comments

Supplementary Report: This report is a supplement to an earlier report issued on the 31/05/2019. At the customer's request, to have a separate report for Honey 3in1 in Brugutas company name.

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. 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
3-in-1 Honey Method	Aqueous extraction, derivatisation. Analysis by UPLC-UV (dihydroxyacetone, 5-hydroxymethylfurfural, methylglyoxal).	-	1
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 (<i>Leptospermum scoparium</i>) 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 (<i>Leptospermum scoparium</i>) 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.

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.

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

B. D. Morris

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