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**TEST REPORT**

**REPORT NO.: 19-09-14890**

*Celtic Wind Crops Limited  
Malta House  
Sean O'Carroll Street  
Ardee  
Co.Louth.  
Att : Mr. Sean McCourt.*

<i>Date of Sample:</i>	<i>12-September-2019</i>	<i>Test Report Number:</i>	<i>19-09-14890</i>
<i>Date of Receipt:</i>	<i>13-September-2019</i>	<i>Sample Type:</i>	<i>500mg CBD Multi-Complex Hemp Oil</i>
<i>Date of Report:</i>	<i>19-September-2019</i>	<i>Sample Reference:</i>	<i>Ref. BN01-003-0919</i>
<i>Laboratory Ref. Number:</i>	<i>19-17090</i>	<i>Sample Presentation:</i>	<i>10mls. Dispensing Bottle</i>
		<i>Weight of sample :</i>	

**Abbreviations :**

*% Vol :*            *percentage volume.*

*% wt:*            *percentage weight.*

*mg/L :*            *milligrams per litre (ppm).*

*ppm :*            *parts per million or mg per litre.*

*mg/g:*            *milligrams per gram.*

## Cannabinoid Profile Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Cannabidiol CBD.	HPLC-PDA	JHG-249	% mass	4.665
Cannabigerol CBG.	HPLC-PDA	JHG-249	% mass	0.200
Cannabichromene CBC.	HPLC-PDA	JHG-249	% mass	0.122
Delta-9-Tetrahydrocannabinol THC.	HPLC-PDA	JHG-249	% mass	Not Detected
Cannabidiol acid CBD-A	HPLC-PDA	JHG-249	% mass	0.070
Cannabigerolic acid CBG-A	HPLC-PDA	JHG-249	% mass	0.013
Tetrahydrocannabivarin THCv	HPLC-PDA	JHG-249	% mass	Not Detected
Tetrahydrocannabivarin Carboxylic acid THCv-A	HPLC-PDA	JHG-249	% mass	Not Detected

Gluten	RP-HPLC	JHG-FT-017	ppm.	< 1
Water Activity $A_w$	Manometric Pressure Measurement	ASTM D8196-18	Without Unit	0.69 $A_w$
Density	Densitometry	EN ISO 12154:2014	$g/cm^3$	0.9388

**Comment:**

Result of Delta-9-Tetrahydrocannabinol (THC) of less than 0.0005% is based on Limit of Detection (LOD) for the Instrumentation used in this method. This is the smallest concentration of analyte that can be reported and is based on analysis of a minimum of 7 spiked samples and 7 method blank samples.

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### Microbiological Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Staph. aureus	Pour Plate Count	APHA 9222	CFU/g.	< 1
Salmonella spp.	Pour Plate Count	APHA 9222	CFU/25g.	< 1
Listeria spp.	Pour Plate Count	APHA 9222	CFU/25g.	< 1
Bacillus cereus	Pour Plate Count	APHA 9222	CFU/g.	< 1
Clostridia spp.	Pour Plate Count	APHA 9222	CFU/g.	< 1
Enterobacteriaceae	Pour Plate Count	APHA 9222	CFU/g.	< 1
Esch. Coli	Pour Plate Count	APHA 9222	CFU/g.	< 1
Yeasts/Molds	Pour Plate Count	APHA 9222	CFU/g.	5

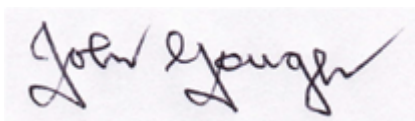
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## Terpenes Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
$\beta$ -Caryophellene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	24
Myrcene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	21
$\beta$ -Sitosterol	GC-FID	Shimadzu HS-GC-FID	mg/kg.	19
Terpinolene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	27
A-Pinene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	15.80
$\beta$ -Pinene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	9.70
Bergamotene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	9
Limonene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	7.50
Merolidol	GC-FID	Shimadzu HS-GC-FID	mg/kg.	8.50
Linalool	GC-FID	Shimadzu HS-GC-FID	mg/kg.	9.60
Humulene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	7.25
Bisabolol	GC-FID	Shimadzu HS-GC-FID	mg/kg.	9
Valencene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	11
Terpinol	GC-FID	Shimadzu HS-GC-FID	mg/kg.	7
Borneol	GC-FID	Shimadzu HS-GC-FID	mg/kg.	8.80
Delta-3-Carene	GC-FID	Shimadzu HS-GC-FID	mg/kg.	9.24

**J.W. GOUGH**



Technical Signatory.

Dated: 19<sup>th</sup>. September 2019