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**TEST REPORT**

**REPORT NO.: 19-09-14924**

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

|                                |                          |                             |   |
|--------------------------------|--------------------------|-----------------------------|---|
| <i>Date of Sample:</i>         | <i>18-September-2019</i> | <i>Test Report Number:</i>  | <i>19-09-14924</i>                        |
| <i>Date of Receipt:</i>        | <i>19-September-2019</i> | <i>Sample Type:</i>         | <i>1,000mg CBD Multi-Complex Hemp Oil</i> |
| <i>Date of Report:</i>         | <i>23-September-2019</i> | <i>Sample Reference:</i>    | <i>Ref. BN01-008-0719</i>                 |
| <i>Laboratory Ref. Number:</i> | <i>19-17124</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 | 9.300           |
| Cannabigerol CBG.                             | HPLC-PDA           | JHG-249          | % mass | 0.250           |
| Cannabichromene CBC.                          | HPLC-PDA           | JHG-249          | % mass | 0.180           |
| Delta-9-Tetrahydrocannabinol THC.             | HPLC-PDA           | JHG-249          | % mass | Not Detected    |
| Cannabidiol acid CBD-A                        | HPLC-PDA           | JHG-249          | % mass | 0.300           |
| Cannabigerolic acid CBG-A                     | HPLC-PDA           | JHG-249          | % mass | 0.055           |
| Tetrahydrocannabivarin THCV                   | HPLC-PDA           | JHG-249          | % mass | Not Detected    |
| Tetrahydrocannabivarin Carboxylic acid THCV-A | HPLC-PDA           | JHG-249          | % mass | Not Detected    |

**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.

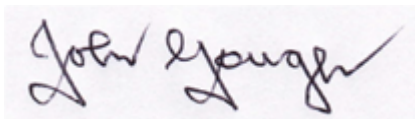
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### Microbiological Analysis

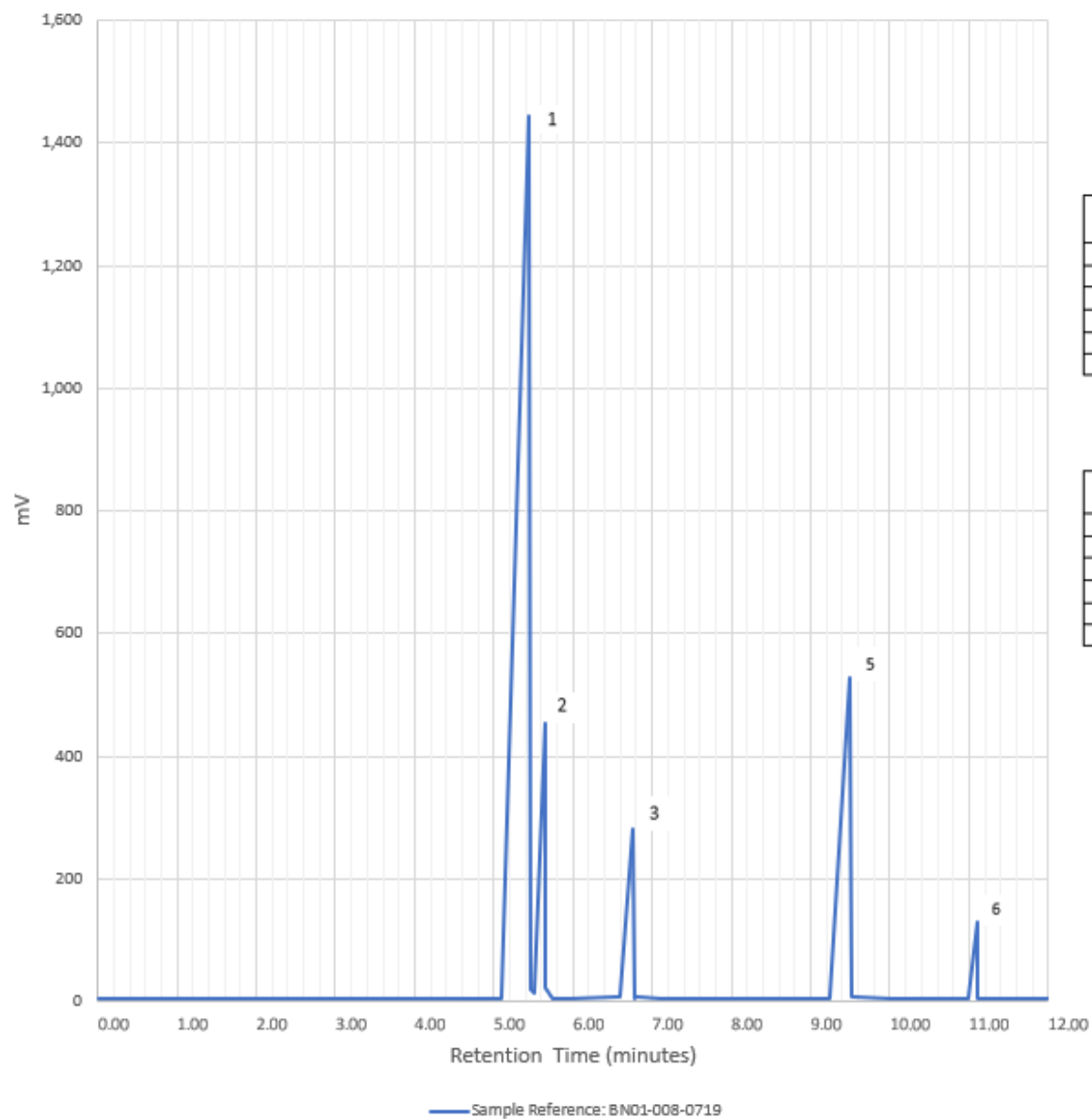
| Parameter          | Method of Analysis | Method Reference | Units    | Reported Levels |
|--------------------|--------------------|------------------|----------|-----------------|
| Staph. aureus      | Pour Plate Count   | APHA 9222        | CFU/g.   | 5               |
| Salmonella spp.    | Pour 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.   | 13              |

**J.W. GOUGH**



**Technical Signatory.**

**Dated: 23<sup>rd</sup>. September 2019**



Client: Celtic Wind Crops Ltd.  
 Sample: 1,000mg Multi-Complex Hemp Oil  
 Ref.: BN01-008-0719  
 Sample Date: 18.08.19  
 Analysis: Cannabinoids Profile

**Table 1. Results**

| Chromatogram No. | Cannabinoid | % m/m        |
|------------------|-------------|--------------|
| 1                | CBD         | 9.300        |
| 2                | CBG         | 0.250        |
| 3                | CBC         | 0.180        |
| 4                | THC         | Not Detected |
| 5                | CBD-A       | 0.300        |
| 6                | CBG-A       | 0.055        |

**Table 2.**

Linearity Coefficient and % Recovery of Cannabinoids by PDA @ 210nm.

| Cannabinoid                       | Linearity R <sup>2</sup> | % Recovery |
|-----------------------------------|--------------------------|------------|
| Cannabidiol CBD.                  | 0.99994                  | 92.7       |
| Cannabigerol CBG.                 | 0.99951                  | 92.9       |
| Cannabichromene CBC.              | 0.00058                  | 102.1      |
| Delta-9-Tetrahydrocannabinol THC. | 0.99925                  | 96.6       |
| Cannabidiolic acid CBD-A.         | 0.99947                  | 93.8       |
| Cannabigerolic acid CBG-A.        | 0.99922                  | 91.1       |