

JHG ANALYTICAL SERVICES LIMITED

Unit 9 Airside

Boeing Avenue

Airport Business Park

Killowen

WATERFORD.

Tel: +353 51 364103

Mob: +353 85 1379 880

Fax: +353 51 364039



**TEST REPORT**

**REPORT NO.: 20-08-17568**

*Att: Mr. Alan Roberts  
Puregenics CBD (UK) Limited  
44, Borough Road  
Middlesborough  
United Kingdom.*

<i>Date of Sample:</i>	<i>13-August-2020</i>	<i>Test Report Number:</i>	<i>20-08-17568</i>
<i>Date of Receipt:</i>	<i>17-August-2020</i>	<i>Sample Type:</i>	<i>1,000mg CBG/Hemp Oil Sample.</i>
<i>Date of Report:</i>	<i>24-August-2020</i>	<i>Sample Reference:</i>	<i>As Dated.</i>
<i>Laboratory Ref. Number:</i>	<i>20-19768</i>	<i>Sample Presentation:</i> <i>Weight of sample :</i>	<i>10ml Glass Dispensing Bottle</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.*

**TEST REPORT**

**REPORT NO.: 20-08-17568**

**Cannabinoid Profile Analysis**

Parameter	Method of Analysis	CAS Number	Units	Reported Levels
Cannabidiol CBD.	HPLC-PDA	13956-29-1	mg/ml.	12
Cannabidiol acid CBD-A	HPLC-PDA	1244-58-2	mg/ml.	0.500
Cannabidivarin CBDV	HPLC-PDA	24274-48-4	mg/ml.	Not Detected
Cannabidivarinic acid CBVD-A	HPLC-PDA	31932-13-5	mg/ml.	Not Detected
Cannabigerol CBG.	HPLC-PDA	25654-31-3	mg/ml.	96.500
Cannabigerolic acid CBG-A	HPLC-PDA	25555-57-1	mg/ml.	3.850
Cannabichromene CBC.	HPLC-PDA	23978-85-0	mg/ml.	Not Detected
Cannabichromenic acid CBC-A	HPLC-PDA	185505-15-1	mg/ml.	0.071
Delta-8-Tetrahydrocannabinol THC.	HPLC-PDA	5957-75-5	mg/ml.	Not Detected
Delta-9-Tetrahydrocannabinol THC.	HPLC-PDA	1972-08-03	mg/ml.	Not Detected
Delta-9-Tetrahydrocannabinolic acid THC-A.	HPLC-PDA	20675-51-8	mg/ml.	Not Detected
Tetrahydrocannabivarin THCV	HPLC-PDA	31262-37-0	mg/ml.	Not Detected
Tetrahydrocannabivarin acid THCV-A	HPLC-PDA	39986-26-0	mg/ml.	Not Detected
Cannabinol CBN	HPLC-PDA	521-35-7	mg/ml.	Not Detected
Cannabinolic acid CBN-A	HPLC-PDA	2808-39-1	mg/ml.	Not Detected
Cannabicyclol CBL	HPLC-PDA	21366-63-2	mg/ml.	Not Detected

**Comment:**

Result of Delta-9-Tetrahydrocannabinol (THC) and Delta-9-Tetrahydrocannabinolic acid (THC-A) of less than 0.005mg/ml. 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.

TEST REPORT

REPORT NO.: 20-08-17568

### Aflatoxins/Ochratoxins Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Ochratoxin	HPLC-PDA	EC 401	µg/ml.	< 0.01
Aflatoxins Scan	HPLC-PDA	EC 401	µg/ml.	< 0.01
B1	HPLC-PDA	EC 401	µg/ml.	< 0.002
B2	HPLC-PDA	EC 401	µg/ml.	< 0.05
G1	HPLC-PDA	EC 401	µg/ml.	< 0.001
G2	HPLC-PDA	EC 401	µg/ml.	< 0.005

### Pesticide Residues Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Organochlorine	UHPLC-MS	APHA 6630	µg/ml.	Not Detected
Organophosphorus	UHPLC-MS	APHA 6630	µg/ml.	Not Detected
Organonitrogen	UHPLC-MS	APHA 6630	µg/ml.	Not Detected
Carbamate Pesticides	UHPLC-MS	APHA 6630	µg/ml.	Not Detected
Pyrethroid Residues	UHPLC-MS	APHA 6630	µg/ml.	Not Detected
Organotin	UHPLC-MS	APHA 6630	µg/ml.	Not Detected

TEST REPORT

REPORT NO.: 20-08-17568

## Terpenes Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
$\beta$ -Caryophellene	GC-MS	APHA 6220	mg/ml.	7.90
$\beta$ -Caryophellene	GC-MS	APHA 6220	mg/ml.	4.50
Myrcene	GC-MS	APHA 6220	mg/ml.	3.75
$\beta$ -Sitosterol	GC-MS-MS	APHA 6230	mg/ml.	2.80
Terpinolene	GC-MS-MS	APHA 6220	mg/ml.	3.30
$\alpha$ -Pinene	GC-MS	APHA 6220	mg/ml.	3.50
$\beta$ -Pinene	GC-MS	APHA 6220	mg/ml.	Not Detected
Bergamotene	GC-MS-MS	APHA 6230	mg/ml.	3.25
Limonene	GC-MS	APHA 6220	mg/ml.	3.50
Merolidol	GC-MS	APHA 6230	mg/ml.	5
Linalool	HLPC-DAD	In-House Method	mg/ml.	No Detected
Humulene	HLPC-DAD	In-House Method	mg/ml.	Not Detected
Bisabolol	HLPC-DAD	In-House Method	mg/ml.	3.50
Valencene	HLPC-DAD	In-House Method	mg/ml.	2
Terpinol	HLPC-DAD	In-House Method	mg/ml.	1.25
Borneol	HLPC-DAD	In-House Method	mg/ml.	2.50

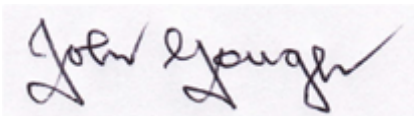
**TEST REPORT**

**REPORT NO.: 20-08-17568**

## Microbiological Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Staph. aureus	Pour Plate Count	APHA 9222	CFU/ml	< 1
Salmonella spp.	Pour Plate Count	APHA 9222	CFU/ml	< 1
Listeria spp.	Pour Plate Count	APHA 9222	CFU/ml	< 1
Bacillus cereus	Pour Plate Count	APHA 9222	CFU/ml	< 1
Clostridia spp.	Pour Plate Count	APHA 9222	CFU/ml	< 1
Enterobacteriaceae	Pour Plate Count	APHA 9222	CFU/ml	< 1
Esch. Coli	Pour Plate Count	APHA 9222	CFU/ml	< 1
Yeasts/Molds	Pour Plate Count	APHA 9222	CFU/ml	6

**J.W. GOUGH**



**Technical Signatory.**

**Dated : 24<sup>th</sup>. August 2020**