
 Certificate ID: **27047**

 Client Sample ID: **021318**

 Matrix: **Concentrates/Extracts - Isolate**

 Date Received: **2/14/2018**


This test method was performed in accordance with the requirements of ISO/IEC 17025. The sample was provided to the laboratory by the client and tested as received. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

Authorization: Matthew Silva, Chemical Engineer	Signature: 	Date: 3/1/2018
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CN: Cannabinoid Profile & Potency [WI-10-04]

 Analyst: *JFD*

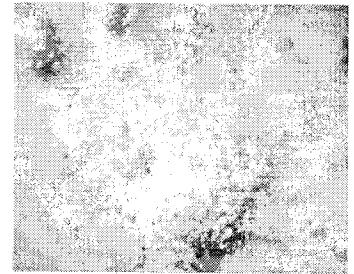
Test Date: 3/1/2018

The client sample was analyzed for plant-based cannabinoids by Convergence Chromatography (CC). The collected data was compared to data collected for certified reference standards at known concentrations.

27047-CN

-	-	99.28	0.06	-	-	-	-	-	-
Δ9-THC	THCV	CBD	CBDV	CBG	CBC	CBN	THCA	CBDA	CBGA

ID	Weight %	Conc.
Δ9-THC	ND	ND
THCV	ND	ND
CBD	99.28 wt %	992.78 mg/g
CBDV	0.06 wt %	0.64 mg/g
CBG	ND	ND
CBC	ND	ND
CBN	ND	ND
THCA	ND	ND
CBDA	ND	ND
CBGA	ND	ND
Total	99.34 wt%	993.43 mg/g
Max THC	-	-
Max CBD	99.28 wt%	992.78 mg/g



Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation: Max THC = (0.877 x THCA) + THC. ND = None detected above the limits of detection (LLD)

MY: Mycotoxin Testing [WI-10-05]

Analyst: AR

Test Date: 2/16/2018

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

27047-MY

Test ID	Date	Results	MDL	Limits	Status*
Total Aflatoxin	2/16/2018	< MDL	3 ppb	< 20 ppb	PASS
Total Ochratoxin	2/16/2018	2.4	2 ppb	< 20 ppb	PASS

TP: Terpenes Profile [WI-10-08]

Analyst: CJH

Test Date: 2/18/2018

The client sample was analyzed by Head-Space Gas Chromatography (HS-GC). The collected data was compared to data collected for certified reference standards at known concentrations.

27047-TP

Compound	ppm	Quantitative Profile	Compound	ppm	Quantitative Profile
Myrcene			Terpineol		
Pulegone			Camphene		
Isopulegol			Fenchone		
Borneol			B-pinene		
Menthol			Eucalyptol		
Nerolidol-cis			A-terpinene		
G-terpinene			3-carene		
Nerolidol-trans			A-pinene		
A-bisabolol			Citral-1		
Linalool			Citral-2		
Linalyl Acetate			Limonene	7	
B-caryophyllene			Citronellol		
Caryophyllene Oxide			Geraniol		
Eugenol			Ocimene-2		
Guaiol			Ocimene-1		
Sabinene			A-phellandrene		
Humulene			Terpinolene		
P-cymene					

ppm 0.00 5.00 10.00 0.00 5.00 10.00

Total Terpene: <0.1 wt%

* Indicates qualitative calculation based on recorded peak areas.

VC: Analysis of Volatile Organic Compounds [WI-10-07]*Analyst: CJH**Test Date: 2/18/2018*

The client sample was analyzed by Head-Space Gas Chromatography (HS-GC). The collected data was compared to data collected for certified reference standards at known concentrations.

27047-VC

Compound	CAS	Amount ¹	Limit ²	Status
Methanol	67-56-1	ND	3,000 ppm	PASS
2-methylbutane	78-78-4	ND	N/A	-
Ethanol	64-17-5	ND	5,000 ppm	PASS
Acetone	67-64-1	ND	5,000 ppm	PASS
Isopropanol	67-63-0	ND	5,000 ppm	PASS
Acetonitrile	75-05-8	ND	410 ppm	PASS

1) ND = None detected above 5 ppm.

2) In ppm, based on USP recommended limits for residual solvents, adopted by the Massachusetts Department of Public Health on 3/31/16. Butane/Propane limits are based on limits established for state of Colorado.

END OF REPORT