

Certificate ID: **23434**

CBD Relieve Technology House, Lissadel Street, Salford, Manchester, M6 6AP

Client Sample ID: **Isolate Batch ODV149/2017**

Matrix: **Concentrates/Extracts - Isolate**

Date Received: **11/8/2017**

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.

Authorization: Matthew Silva, Chemical Engineer	Signature: 	Date: 11/15/2017
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CN: Cannabinoid Profile & Potency [WI-10-04]

Analyst: *JFD*

Test Date: *11/13/2017*

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.

23434-CN



ID	Weight %	Conc.
Δ9-THC	ND	ND
THCV	ND	ND
CBD	99.17 wt %	991.70 mg/g
CBDV	0.16 wt %	1.59 mg/g
CBG	ND	ND
CBC	ND	ND
CBN	ND	ND
THCA	ND	ND
CBDA	ND	ND
CBGA	ND	ND
Total	99.33 wt%	993.29 mg/g
Max THC	-	-
Max CBD	99.17 wt%	991.70 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)

MB1: Microbiological Contaminants [WI-10-09]

Analyst: MS

Test Date: 11/8/2017

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23434-MB1

Symbol	Analysis	Results	Units	Limits*	Status
AC	Total Aerobic Bacterial Count	<100	CFU/g	10,000 CFU/g	PASS
CC	Total Coliform Bacterial Count	<100	CFU/g	100 CFU/g	PASS
EB	Total Bile Tolerant Gram Negative Count	<100	CFU/g	100 CFU/g	PASS
YM	Total Yeast & Mold	<100	CFU/g	1,000 CFU/g	PASS

Note: All recorded Microbiological tests are within the established limits.

MB2: Pathogenic Bacterial Contaminants [WI-10-10]

Analyst: matt

Test Date: 11/9/2017

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23434-MB2

Test ID	Analysis	Results	Units	Limits*	Status
23434-ECPT	E. coli (O157)	Negative	NA	Non Detected	PASS
23434-SPT	Salmonella	Negative	NA	Non Detected	PASS

Note: All recorded pathogenic bacteria tests passed.

MY: Mycotoxin Testing [WI-10-05]

Analyst: AR

Test Date: 11/14/2017

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.

23434-MY

Test ID	Date	Results	MDL	Limits	Status*
Total Aflatoxin	11/14/2017	< MDL	3 ppb	< 20 ppb	PASS
Total Ochratoxin	11/14/2017	< MDL	2 ppb	< 20 ppb	PASS

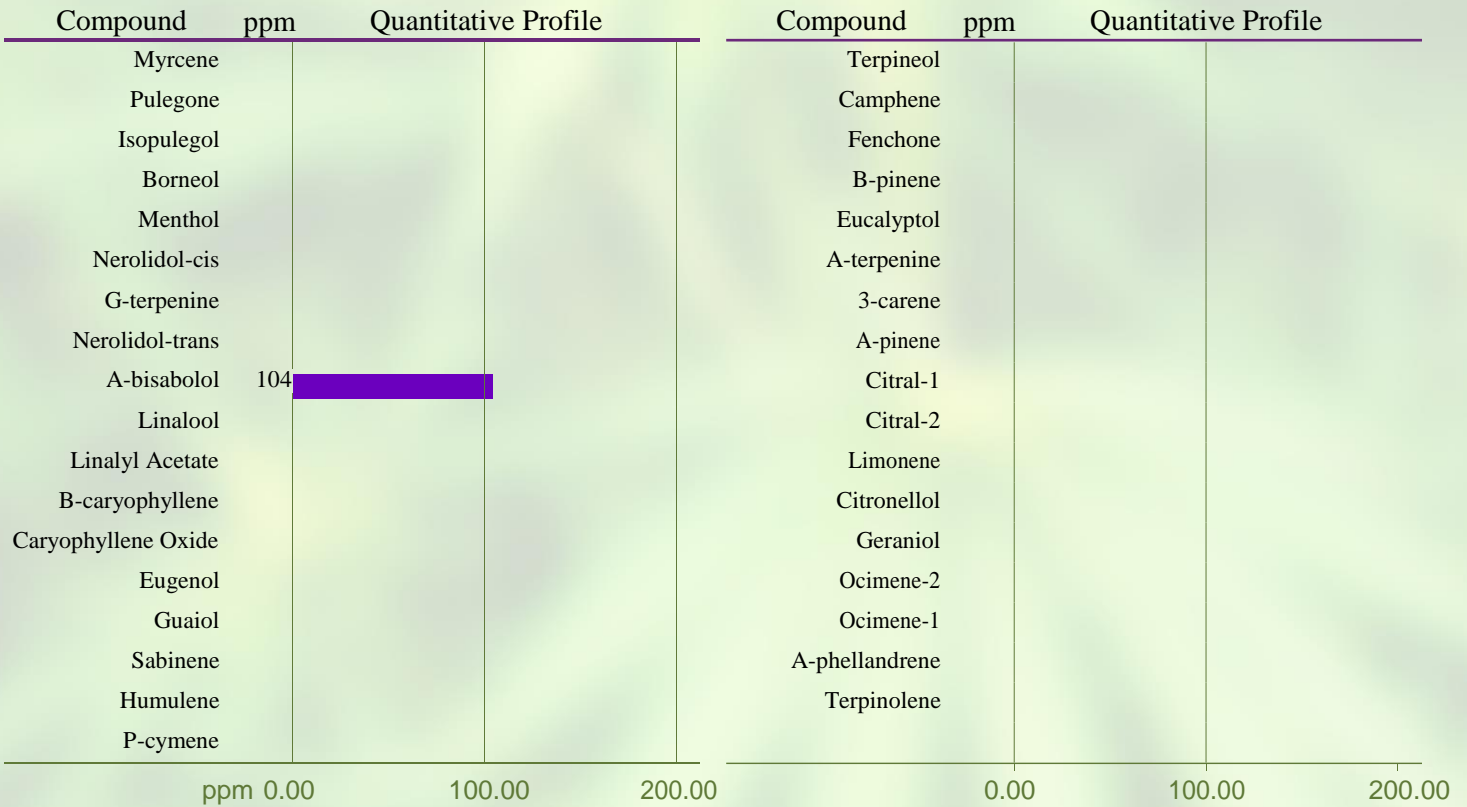
TP: Terpenes Profile [WI-10-08]

Analyst: CJH

Test Date: 11/14/2017

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.

23434-TP



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: 11/14/2017

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.

23434-VC

Compound	CAS	Amount ¹	Limit ²	Status
Propane	74-98-6	ND	N/A	-
Dimethylether		ND	N/A	-
Butane	106-97-8	ND	5,000 ppm	PASS
Methanol	67-56-1	ND	3,000 ppm	PASS
Pentane	109-66-0	ND	5,000 ppm	PASS
Ethyl Ether	60-29-7	148 ppm	5,000 ppm	PASS
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
Heptane	142-82-5	ND	5,000 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