Certificate ID: 58967

Received: 7/11/19

Client Sample ID: Resilience Body Lotion

Lot Number:

Matrix: Topical - Lotion

Scan OR Code for authenticity

HK Enterprises, LLC

14 INVERNESS DR EAST, SUITE G116 ENGLEWOOD, CO 80112

**Attn: Michael Tatz** 

Authorization:

Jon Podgorni, Lab Manager

Signature:

on Podgorne

Date:

7/19/2019







Accreditation # 80585

The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01]

Analyst: JSG

*Test Date: 7/16/2019* 

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

#### 58967-CN

30707 611			
ID	Weight %	Concentration (mg/g)	
D9-THC	ND	ND	
THCV	ND	ND	
CBD	0.31	3.11	
CBDV	0.01	0.06	
CBG	ND	ND	
CBC	ND	ND	
CBN	ND	ND	
THCA	ND	ND	
CBDA	ND	ND	
CBGA	ND	ND	
D8-THC	ND	ND	
exo-THC	ND	ND	
Total	0.32	3.17	0% Cannabinoids (wt%) 0.3%
Max THC		-	
Max CBD	0.31	3.11	

Limit of Quantitation (LOQ) = 0.0097 wt%

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. This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND = None detected above the limits of detection (LLD)

# EA: Elemental Analysis [WI-10-13]

Analyst: JFD

Test Date: 7/18/2019

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.

58967-EA

Symbol	Metal	Conc. 1	MDL	Limits <sup>2</sup>	Status
Al	Aluminum	468 ug/kg	5 ug/kg	-	
As	Arsenic	ND	4 ug/kg	150 ug/kg	PASS
Cd	Cadmium	ND	1 ug/kg	2500 ug/kg	PASS
Ca	Calcium	3,987 ug/kg	500 ug/kg	-	
Cr	Chromium	18 ug/kg	5 ug/kg		
Co	Cobalt	ND	10 ug/kg		
Cu	Copper	ND	500 ug/kg	100000 ug/kg	PASS
Fe	Iron	420 ug/kg	5 ug/kg	-	
Pb	Lead	2 ug/kg	2 ug/kg	500 ug/kg	PASS
Mg	Magnesium	3,864 ug/kg	500 ug/kg	-	
Mn	Manganese	ND	500 ug/kg	-	
Hg	Mercury	ND	2 ug/kg	1500 ug/kg	PASS
Mo	Molybdenum	ND	50 ug/kg	10000 ug/kg	PASS
Ni	Nickel	ND	50 ug/kg	50000 ug/kg	PASS
P	Phosphorus	ND	500 ug/kg	-	
K	Potassium	281,412 ug/kg	5 ug/kg		
Se	Selenium	ND	10 ug/kg	-	
Ag	Silver	ND	10 ug/kg		
S	Sulfur	557 ug/kg	5 ug/kg	-	
Sn	Tin	ND	5000 ug/kg	-	
Zn	Zinc	ND	5 ug/kg	-	

<sup>1)</sup> ND = None detected to the Method Detection Limit (MDL)

<sup>2)</sup> USP recommended maximum daily limits for oral drug product.

VC: Analysis of Volatile Organic Compounds [WI-10-28]

Analyst: CMA

Test Date: 7/15/2019

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.

58967-VC

Compound	CAS	Amount <sup>1</sup>	Limit <sup>2</sup>	RL	Status
Propane	74-98-6	ND	1,000 ppm	200	PASS
Isobutane	75-28-5	ND	1,000 ppm	200	PASS
Butane	106-97-8	ND	1,000 ppm	200	PASS
Methanol	67-56-1	ND	3,000 ppm	200	PASS
Pentane	109-66-0	ND	5,000 ppm	200	PASS
Ethanol	64-17-5	ND	5,000 ppm	200	PASS
Acetone	67-64-1	ND	5,000 ppm	200	PASS
Isopropanol	67-63-0	ND	5,000 ppm	200	PASS
Acetonitrile	75-05-8	ND	410 ppm	200	PASS
Hexane	110-54-3	ND	290 ppm	200	PASS
Heptane	142-82-5	ND	5,000 ppm	200	PASS

<sup>1)</sup> ND = Not detected at a level greater than the Reporting Limit (RL).

# **END OF REPORT**

<sup>2)</sup> 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.



Certificate ID: **39628-89** 

Received: 9/12/18

Client Sample ID: LOTION 18249 LMG 091118

Lot Number: TCLMG18249

Matrix: Topical - Lotion

Scan QR Code for authenticity ResilienceCBD, LTD

9600 W. Jewell Ave, Suite 1 Lakewood, CO 80232

Attn: (720) 699-7577

Authorization:

Signature:

Chris Hudalla, Chief Science Officer

Christophen Hudalla

Date:

10/1/2018







Accreditation

# 80585

The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2005. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

CN: Cannabinoid Profile & Potency [WI-10-04]

Analyst: JDP

*Test Date: 9/13/2018* 

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.

#### 39628-CN

ID	Weight %	Conc.			
D9-THC	ND	ND			
THCV	ND	ND			
CBD	0.33 wt %	3.34 mg/g			
CBDV	ND	ND			
CBG	ND	ND			
CBC	ND	ND			
CBN	ND	ND			
THCA	ND	ND			
CBDA	ND	ND			
CBGA	ND	ND			
Total	0.33 wt%	3.34 mg/g	0%	Cannabinoids (wt%)	0.3%
Max THC		-			
Max CBD	0.33 wt%	3.34 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:  $Max THC = (0.877 \times THCA) + THC$ . ND = None detected above the limits of detection (LLD)

## HM: Heavy Metal Analysis [WI-10-13]

Analyst: JFD

*Test Date: 9/19/2018* 

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.

39628-HM					Use 1	Limits <sup>2</sup>		
Symbol	Metal	Conc. <sup>1</sup>	Units	MDL	All	Ingestion	Units	Status
As	Arsenic	ND	μg/kg	4	200	1500	μg/kg	PASS
Cd	Cadmium	ND	μg/kg	1	200	500	μg/kg	PASS
Hg	Mercury	ND	μg/kg	2	100	1500	μg/kg	PASS
Pb	Lead	19	μg/kg	2	500	1000	μg/kg	PASS

<sup>1)</sup> ND = None detected to Lowest Limits of Detection (LLD)

# MB1: Microbiological Contaminants [WI-10-09]

Analyst: Doug

*Test Date:* 9/12/2018

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.

#### 39628-MB1

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

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

<sup>2)</sup> MA Dept. of Public Health: Protocol for MMJ and MIPS, Exhibit 4(a) for all products.

<sup>3)</sup>USP exposure limits based on daily oral dosing of 1g of concentrate for a 110 lb person.

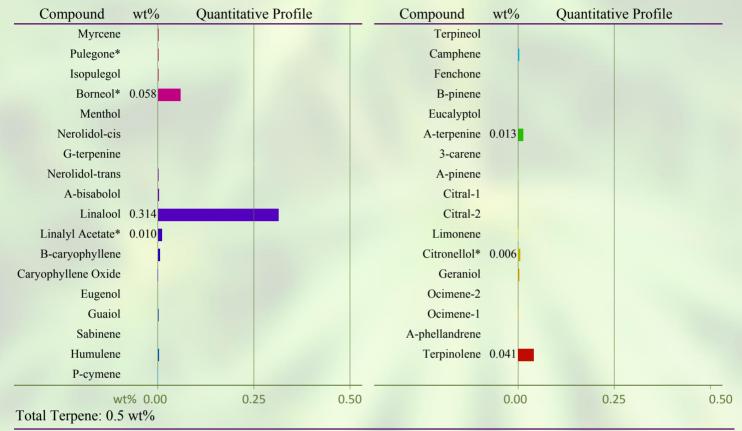
### TP: Terpenes Profile [WI-10-08]

Analyst: CJH

Test Date: 9/17/2018

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.

39628-TP



<sup>\*</sup> Indicates qualitative calculation based on recorded peak areas.

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.

39628-VC

Compound	CAS	Amount <sup>1</sup>	Limit <sup>2</sup>	Status
Propane	74-98-6	ND	N/A	-
Isobutane	75-28-5	ND	5,000 ppm	PASS
Butane	106-97-8	ND	5,000 ppm	PASS
Methanol	67-56-1	ND	3,000 ppm	PASS
Ethanol	64-17-5	ND	5,000 ppm	PASS
Acetone	67-64-1	11 ppm	5,000 ppm	PASS
Isopropanol	67-63-0	167 ppm	5,000 ppm	PASS
Hexane	110-54-3	ND	290 ppm	PASS
Heptane	142-82-5	ND	5,000 ppm	PASS

<sup>1)</sup> ND = None detected above 5 ppm.

### **END OF REPORT**

<sup>2)</sup> 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.

Certificate ID: **76021** Received: **1/27/20** 

Client Sample ID: Resilience Body Lotion

Lot Number: 19354LEM

Matrix: Topicals - Lotion

Scan QR Code for authenticity

**HK Enterprises, LLC** 

**Attn: Michael Tatz** 

14 INVERNESS DR EAST, SUITE G116

ENGLEWOOD, CO 80112

Signature: Date:

Jon Podgorni, Lead Research Chemist

2/6/2020







Accreditation

# 80585

The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01]

Analyst: JFD

*Test Date: 1/28/2020* 

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

#### 76021-CN

Authorization:

70021 011				
ID	Weight %	Concentration (mg/g)		
D9-THC	ND	ND		
THCV	ND	ND		
CBD	0.35	3.51		
CBDV	ND	ND		
CBG	ND	ND		
CBC	ND	ND		
CBN	ND	ND		
THCA	ND	ND		
CBDA	ND	ND		
CBGA	ND	ND		
D8-THC	ND	ND		
exo-THC	ND	ND		
Total	0.35	3.51	0% Cannabinoids (wt%)	0.4%
Max THC	ND	ND		
Max CBD	0.35	3.51		

Limit of Quantitation (LOQ) = 0.010 wt%

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. This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND = None detected above the limits of detection (LOD), which is half of LOQ.

### EA: Elemental Analysis [WI-10-13]

Analyst: CJS

Test Date: 1/28/2020

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.

76021-EA

Symbol	Metal	Conc.1(µg/kg)	RL (µg/kg)	Limits <sup>2</sup> (µg/kg)	Status
Al	Aluminum	293	50		
As	Arsenic	ND	50	200	PASS
Cd	Cadmium	ND	50	200	PASS
Ca	Calcium	4,005	500		
Cr	Chromium	ND	50	300	PASS
Co	Cobalt	ND	50	300	PASS
Cu	Copper	ND	50	3,000	PASS
Fe	Iron	387	50	-	
Pb	Lead	ND	50	500	PASS
Mg	Magnesium	7,451	50	-	
Mn	Manganese	60	50	-	
Hg	Mercury	ND	50	100	PASS
Mo	Molybdenum	ND	50	1,000	PASS
Ni	Nickel	ND	50	500	PASS
P	Phosphorus	ND	500	-	
K	Potassium	18,626	500	-	
Se	Selenium	ND	50	-	
Ag	Silver	ND	50	700	PASS
S	Sulfur	773	500	-	
Sn	Tin	2,709	500	6,000	PASS
Zn	Zinc	268	50	-	

<sup>1)</sup> ND = None detected to the Method Detection Limit (MDL)

#### MB1: Microbiological Contaminants [WI-10-09]

Analyst: MM

Test Date: 1/28/2020

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.

#### 76021-MB1

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

Recommended limits established by the American Herbal Pharmacopoeia (AHP) monograph for Cannabis Inflorescence [2013], for consumable botanical products, including processed and unprocessed cannabis materials, and solvent-based extracts. Note: All recorded Microbiological tests are within the established limits.

<sup>2)</sup> USP recommended maximum daily limits for inhalational drug product.

### PST: Pesticide Analysis [WI-10-11]

Analyst: CJR

*Test Date: 2/3/2020* 

The client sample was anlayzed for pesticides using Liquid Chromatography with Mass Spectrometric detection (LC/MS/MS). The method used for sample prep was based on the European method for pesticide analysis (EN 15662).

76021-PST

Analyte	CAS	Result	Units	LLD	Limits (ppb)	Status
Abamectin	71751-41-2	ND	ppb	0.2	300	PASS
Azoxystrobin	131860-33-8	ND	ppb	0.10	40000	PASS
Bifenazate	149877-41-8	ND	ppb	0.10	5000	PASS
Bifenthrin	82657-04-3	ND	ppb	0.20	500	PASS
Cyfluthrin	68359-37-5	ND	ppb	0.50	1000	PASS
Daminozide	1596-84-5	ND	ppb	10.00	10	*
Etoxazole	153233-91-1	ND	ppb	0.10	1500	PASS
Fenoxycarb	72490-01-8	ND	ppb	0.10	10	PASS
Imazalil	35554-44-0	ND	ppb	0.10	10	PASS
Imidacloprid	138261-41-3	ND	ppb	0.10	3000	PASS
Myclobutanil	88671-89-0	ND	ppb	0.10	9000	PASS
Paclobutrazol	76738-62-0	ND	ppb	0.10	10	PASS
Piperonyl butoxide	51-03-6	ND	ppb	0.10	8000	PASS
Pyrethrin	8003-34-7	ND	ppb	0.1	1000	PASS
Spinosad	168316-95-8	ND	ppb	0.1	3000	PASS
Spiromesifen	283594-90-1	ND	ppb	0.10	12000	PASS
Spirotetramat	203313-25-1	ND	ppb	0.10	13000	PASS
Trifloxystrobin	141517-21-7	ND	ppb	0.10	30000	PASS

<sup>\*</sup> Testing limits for ingestion established by the State of California: CCR, Title 16, Division 42, Chapter 5, Section 5313. ND indicates "none detected" above the lower limit of detection (LLD). Analytes marked with (\*) indicate analytes for which no recovery was observed for a pre-spiked matrix sample.

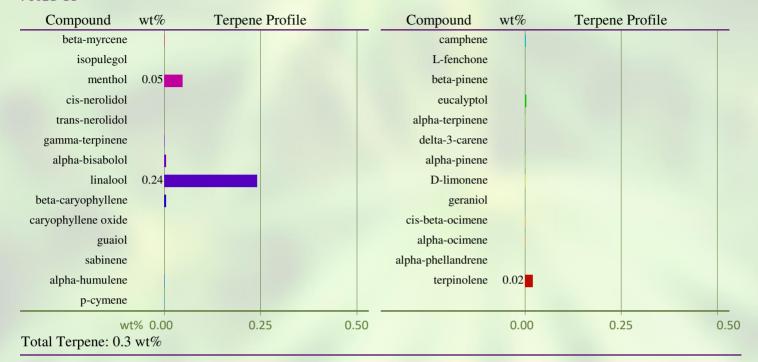
# TP: Terpenes Profile [WI-10-27]

Analyst: JR

Test Date: 2/4/2020

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. All values are semiquantitative estimates based on recorded peak areas relative to terpene calibration data.

76021-TP



### VC: Analysis of Volatile Organic Compounds [WI-10-28]

Analyst: JR

*Test Date: 1/27/2020* 

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.

76021-VC

Compound	CAS	Amount 1	Limit <sup>2</sup>	RL	Status
Propane	74-98-6	ND	1,000 ppm	100	PASS
Isobutane	75-28-5	ND	1,000 ppm	100	PASS
Butane	106-97-8	ND	1,000 ppm	100	PASS
Methanol	67-56-1	ND	3,000 ppm	100	PASS
Pentane	109-66-0	ND	5,000 ppm	100	PASS
Ethanol	64-17-5	ND	5,000 ppm	100	*
Acetone	67-64-1	ND	5,000 ppm	100	PASS
Isopropanol	67-63-0	191 ppm	5,000 ppm	100	PASS
Acetonitrile	75-05-8	ND	410 ppm	100	PASS
Hexane	110-54-3	ND	290 ppm	100	PASS
Heptane	142-82-5	ND	5,000 ppm	100	PASS

<sup>1)</sup> ND = Not detected at a level greater than the Reporting Limit (RL).

# **END OF REPORT**

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

<sup>(\*)</sup> For ethanol, as many formulations contain flavorings based on ethanol extracts of natural products, no status has been assigned.