

Certificate ID: 77559

Received: 2/13/20

Client Sample ID: Hangover Shot - Caffeine

Lot Number: 20039

Matrix: Water Soluble - Tinctures

Jon Podgorni, Lead Research Chemist





Authorization:

Signature: Podgorne Date:

The data contained within this report was collected in accordance with the requirements

2/20/2020







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. # 80585

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

Analyst: JFD

Test Date: 2/17/2020

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.

77559-CN

77337-614					
ID	Weight %	Concentration (mg/mL)			
D9-THC	ND	ND			
THCV	< 0.00	<loq< td=""><td></td><td></td><td></td></loq<>			
CBD	0.01	0.09			
CBDV	0.00	0.01			
CBG	< 0.00	<loq< td=""><td></td><td></td><td></td></loq<>			
CBC	ND	ND			
CBN	ND	ND			
THCA	ND	ND			
CBDA	ND	ND			
CBGA	ND	ND			
D8-THC	ND	ND			
exo-THC	ND	ND			
Total	0.01	0.11	0%	Cannabinoids (wt%)	0.0%
Max THC	ND	ND			
Max CBD	0.01	0.09			

Limit of Quantitation (LOQ) = 0.0005 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.

END OF REPORT



Certificate of Analysis

Client Information

PurHealth RX 14663 S. Heritage Crest Way Bluffdale, UT 84065 USA 801.903.7789

Sample Information

ARL ID: 325980 Date Received: 2/7/2020

Description: Hangover Shot w/ Caffeine

Lot#: 20039

Analysis	Method	MDL	Specification	Results	UOM
Complete Micro Profile Pseudomonas	USP, AOAC				
Total Plate Count	USP <2021>	10	Record Only	None Detected	cfu's/g
Coliforms	AOAC 991.14	10	Record Only	None Detected	cfu's/g
E. coli	USP <2022>	Absent	Record Only	Absent	cfu's/10g
Staphylococcus aureus	USP <2022>	Absent	Record Only	Absent	cfu's/10g
Salmonella	USP <2022>	Absent	Record Only	Absent	cfu's/10g
Pseudomonas aeruginosa	USP <62>	Absent	Record Only	Absent	cfu's/10g
Yeast (Rapid)	AOAC RI	10	Record Only	>2500	cfu's/g
Mold (Rapid)	AOAC RI	10	Record Only	None Detected	cfu's/g

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Jacob Teller Feb 12, 2020

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

Analyst: JFD

Test Date: 3/29/2018

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.

25691-HM					Use	Limits 2	uits 2	
Symbol	Metal	Conc.1	Units	MDL	All	Ingestion	Units	Status
As	Arsenic	ND	μg/kg	4	200	1500	μg/kg	PASS
Cd	Cadmium	3	μg/kg	1	200	500	μg/kg	PASS
Hg	Mercury	3	μg/kg	2	100	1500	μg/kg	PASS
Pb	Lead	37	μg/kg	2	500	1000	μg/kg	PASS

¹⁾ ND - None detected to Lowest Limits of Detection (LLD)

MB1: Microbiological Contaminants [WI-10-09]

Analyst: Alyson

Test Date: 3 29 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.

25691-MBI

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: 3/29/2018

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.

25691-MB2

Test ID	Analysis	Results	Units	Limits*	Status
25691-ECPT	E. coli (O157)	Negative	NA	Non Detected	PASS
25691-SPT	Salmonella	Negative	NA	Non Detected	PASS

Note: All recorded pathogenic bacteria tests passed.

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

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

PST: Pesticide Analysis [WI-10-11]

Analyst: KSB

Test Date: 3/29/2018

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).

25691-PST

An	alyte	CAS	Result	Units	LLD	Limits (ppb)	Status
The state of the s	nectin	71751-41-2	ND	ppb	0.2	10	PASS
Azoxy	strobin	131860-33-8	ND	ppb	1.0	10	PASS
Bife	nazate	149877-41-8	ND	ppb	0,1	10	PASS
Bife	nthrin	82657-04-3	ND	ppb	0.2	10	PASS
Cyff	uthria	68359-37-5	ND	ppb	0.5	10	*
Dami	inozide	1596-84-5	ND	ppb	10	10	PASS
Dich	lorvos	62-73-7	ND	ppb	3	10	
Eto	kazole	153233-91-1	ND	ppb	0.1	10	PASS
Feno	xycarb	72490-01-8	ND	ppb	0.1	10	PASS
<u>.</u> Im:	azalil 💮	35554-44-0	ND	ppb	0.1	10	PASS
Imida	cloprid	138261-41-3	ND	ppb	0,1	10	PASS
Mycle	obutanil	88671-89-0	ND	ppb	0.1	10	PASS
Paclo	butrazol	76738-62-0	ND	ppb	1.0	10	PASS
Piperony	l butoxide	51-03-6	ND	ppb	0.1	10	PASS
Рут	ethrin	8003-34-7	ND	ppb	0.1	10	PASS
Spi	nosad	168316-95-8	ND	ppb	0.1	10	PASS
Spiro	mesifen	283594-90-1	ND	ppb	0.1	10	PASS
Spiro	tetramat	203313-25-1	ND	ppb	0.1	10	PASS
Triflo	cystrobin	141517-21-7	ND	ppb	0.1	10	PASS

^{*} Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 5. 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.

VC: Analysis of Volatile Oranic Compounds [WI-10-07] Analysi: CJH Test Date: 3 29 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.

25691-VC

Compound	CAS	Amount 1	Limit ²	Status
Propane	74-98-6	ND	N/A	
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
2,2-dimethylbutane		ND	N/A	
Acetone	67-64-1	ND	5,000 ppm	PASS
Isopropanol	67-63-0	ND	5,000 ppm	PASS
2,3-dimethylbutane	79-29-8	ND	N/A	
3-methylpentane	96-14-0	ND	N/A	
Hexane	110-54-3	ND	290 ppm	PASS
l-propanol	71-23-8	ND	5,000 ppm	PASS
Toluene	108-88-3	ND	890 ppm	PASS

¹⁾ ND = None detected above 5 ppm.

END OF REPORT

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.