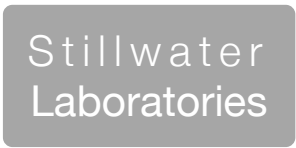




total cannabinoids		CBD	THC
	total	99.07%	0.00%
99.6%	decarb total	99.04%	0%



Sample Handling

test ID sample date 5/16/19 2:29 PM
 order 4472 labID 9VD02 weight
 source

Disclaimer: This COA is for the raw used in the Broad Spectrum CBD cream with Lot #PM021120. The full product COA is currently being tested.

isolate



Methods

	method	equipment
weights	MA9VM	AUX120.1
potency	PO9VM	LC-2030C
terpenes	TE9VM	QP2020/HS20
pesticides	PE9VM	LC-8060
mycotoxins	MY9VM	LC-8060
microbial	MI9VDS	Hardy Diag
solvents	SO9VM	QP2020/HS-2
metals	ME9VM	ICPMS2030

Potency

	%	estimated error
tetrahydrocannabinolic acid (THCa)	ND	± 0.02 %
Δ ⁹ -tetrahydrocannabinol (Δ ⁹ THC)	ND	± 0.02 %
Δ ⁸ -tetrahydrocannabinol (Δ ⁸ THC)	ND	± 0.02 %
tetrahydrocannabivarin (THCv)	ND	± 0.02 %
cannabidiolic acid (CBDA)	.21%	± 0.05 %
cannabidiol (CBD)	98.86%	± 1.04 %
cannabidivarin (CBDv)	.4%	± 0.07 %
cannabigerolic acid (CBGA)	ND	± 0.02 %
cannabigerol (CBG)	ND	± 0.02 %
cannabinol (CBN)	.13%	± 0.04 %
cannabichromene (CBC)	ND	± 0.02 %

Terpenes

terpenes not tested / not required

Solvents

	MT limit	9VD02	LOQ
propane	5,000	0 ppm	<10ppm
butanes	5,000	0 ppm	<10ppm
pentanes	5,000	2522 ppm	<10ppm
hexanes	290	0 ppm	<10ppm
cyclohexane	3,880	0 ppm	<10ppm
heptanes	5,000	0 ppm	<10ppm
methanol	3,000	0 ppm	<10ppm
isopropanol	5,000	0 ppm	<10ppm
acetone	5,000	0 ppm	<10ppm
ethyl acetate	5,000	0 ppm	<10ppm
benzene	2	0 ppm	<0.2ppm
toluene	890	0 ppm	<10ppm
xylenes	2,170	0 ppm	<10ppm
chloroform	2	0 ppm	<0.2ppm
dichloromethane	600	0 ppm	<10ppm

Pesticides (MT)

pesticides not tested / not required

Pesticides (other)

not tested / not required

Toxic Metals

metals not tested / not required

Microbial

microbial not tested

Comments

• All testing was completed onsite at 6073 US93N, Olney MT •• Potency (cannabinoid concentration) is calculated from the equation: [cannabinoid] = [cannabinoid]_{HPLC} x volume_{dilution}/m_{dry}. Terpene concentration is calculated from the equation: [terpene] = (terpene mass)_{GCMS} / m_{dry}. ••• Decarboxyted cannabinoid concentration is calculated from the equation XXX_{total} = 0.877 x XXX_A + XXX •••• Standards are used to calibrate the resulting data and estimate error using a standard estimate of error method; this is combined with error from weighing and dilution using the propagation of error formula s_g² = Σ(∂f/∂i)²s_i² where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) ± t_{CL90} x s_g. Sampling error is not considered in error calculations.

Certified by:

Ron Brost

Ron Brost, PhD PEng (Chem)
 Director
 6073 US93N, Olney MT 59927
 406-881-2019 rdb@stwlabs.com

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