

Certificate of Analysis

Order #: NEW200115-020173 Order Date: 2020-01-15 Collection Date: 2020-01-17 Report Date: 2020-01-23

Batch #: LC01102001
Sample #: AAAB306
Specimen Type: CBD/HEMP Derivative Products
Extracted From: Industrial Hemp
Description: 86% CBD + 5% Minors

Initial Gross Weight: 23426mg
Method: SOP-3



Potency Tested	Residual Solvents Passed	Heavy Metals Passed
Mycotoxins Passed	Pathogenic Passed	Pathogenic Microbiology Passed
Terpenes Tested	Pesticides Passed	



The photos on this report are of a sample collected by the lab and may vary from the final packaging.

CBD Total 84.070%	THC Total 0.148%	CBG Total 5.259%
CBN Total Not Detected	Other Cannabinoids 1.920%	Total Cannabinoids 91.397%

Potency - 11 (Tested)

								(HPLC)			
Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)
CBC	<LOQ		0.001	CBD	840.700	84.070	0.001	CBDA	<LOQ		0.001
CBDV	15.500	1.550	0.001	CBG	52.170	5.217	0.001	CBGA	0.484	0.048	0.001
CBN	<LOQ		0.001	Delta-8-THC	<LOQ		0.001	Delta-9-THC	1.476	0.148	0.001
THCA-A	<LOQ		0.001	THCV	3.697	0.370	0.001	Total CBD	840.700	84.070	0.001
Total THC	1.476	0.148	0.001								

*Total CBD = CBD + (CBD-A * 0.877), *Total THC = THCA-A * 0.877 + Delta 9 THC, *CBG Total = (CBGA * 0.877) + CBG, *CBN Total = (CBNA * 0.877) + CBN, *Other Cannabinoids Total = CBC + CBDV + THCV + THCV-A, *Total Detected Cannabinoids = CBD Total + CBG Total + CBN Total + THC Total + CBC + CBDV + THCV + THCV-A (mg/g) = Milligram per Gram, , LOQ = Limit of Quantitation

Xueli Gao
Ph.D., DABT

Lab Toxicologist

Aixia Sun
D.H.Sc., M.Sc., B.Sc., MT (AAB)

Principal Scientist

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721 Cortaro Drive
Sun City Center, FL - 33573

P: +1 (866) 762-8379
F: +1 (813) 634-4538

E: info@acslabcannabis.com
http://www.acslabcannabis.com

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Residual Solvents (Extract Only) (Passed)

(GC/GCMS)

Analyte	Action Level (ppm)	Result (ppm)	LOQ (ppm)	Analyte	Action Level (ppm)	Result (ppm)	LOQ (ppm)	Analyte	Action Level (ppm)	Result (ppm)	LOQ (ppm)
Acetone	5000	ND	87.9	Benzene	1.6	ND	1.6	Chloroform	53	ND	53
Ethanol	5000	ND	26.7	Hexane	60	ND	36.6	I-Butane	5000	ND	100
Isopropanol	5000	ND	52.3	Methanol	3000	ND	87.9	N-Butane	5000	ND	200
Pentane	5000	Passed	389.5	Toluene	890	ND	38.4				

(ppm) = Parts per Million, (ppm) = (µg/g), , LOQ = Limit of Quantitation

Heavy Metals (Passed)

(ICP-MS)

Analyte	Action Level (ppb)	Result (ppb)	LOQ (ppb)	Analyte	Action Level (ppb)	Result (ppb)	LOQ (ppb)	Analyte	Action Level (ppb)	Result (ppb)	LOQ (ppb)
Arsenic (As)	1500	<LOQ	100	Cadmium (Cd)	500	<LOQ	100	Lead (Pb)	500	<LOQ	100
Mercury (Hg)	3000	<LOQ	100								

(ppb) = Parts per Billion, (ppb) = (µg/kg), , LOQ = Limit of Quantitation

Mycotoxins (Passed)

(LCMS/MS)

Analyte	Action Level (ppb)	Result (ppb)	LOQ (ppb)	Analyte	Action Level (ppb)	Result (ppb)	LOQ (ppb)	Analyte	Action Level (ppb)	Result (ppb)	LOQ (ppb)
Aflatoxin B1		<LOQ	6	Aflatoxin B2		<LOQ	6	Aflatoxin G1		<LOQ	6
Aflatoxin G2		<LOQ	6	Aflatoxin Total	20	<LOQ	6	Ochratoxin A	20	<LOQ	12

(ppb) = Parts per Billion, (ppb) = (µg/kg), , LOQ = Limit of Quantitation

Xueli Gao
Ph.D., DABT

Lab Toxicologist

Aixia Sun

D.H.Sc., M.Sc., B.Sc., MT (AAB)

Principal Scientist

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Pathogenic Microbiology #3 (HEMP Compliance Panel) (Passed) (qPCR)

Analyte	Result
Listeria	Absence

Pathogenic Microbiology #1 (MMTC Compliance Panel) (Passed) (Micro Array)

Analyte	Result	Analyte	Result
Salmonella	Absence	STEC E. Coli	Absence

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Terpenes - FL (Tested)

Terpenes - FL (Tested)								(GC/GCMS)			
Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)
(+)-Cedrol	<LOQ		0.001	(R)-(+)-Limonene	0.947	0.095	0.001	3-Carene	<LOQ		0.001
Alpha-Bisabolol	1.111	0.111	0.001	alpha-Cedrene	<LOQ		0.001	alpha-Humulene	<LOQ		0.001
alpha-Phellandrene	<LOQ		0.001	alpha-Pinene	<LOQ		0.001	alpha-Terpinene	<LOQ		0.001
Borneol	<LOQ		0.001	beta-Myrcene	<LOQ		0.001	beta-Pinene	<LOQ		0.001
Caryophyllene oxide	<LOQ		0.001	Camphene	<LOQ		0.001	Camphors	<LOQ		0.001
Fenchyl Alcohol	<LOQ		0.001	cis-Nerolidol	<LOQ		0.001	Eucalyptol	<LOQ		0.001
Guaiol	<LOQ		0.001	Farnesene	<LOQ		0.001	Fenchone	<LOQ		0.001
Isopulegol	<LOQ		0.001	gamma-Terpinene	<LOQ		0.001	Geraniol	<LOQ		0.001
Ocimene	<LOQ		0.001	Hexahydrothymol	<LOQ		0.001	Geranyl acetate	<LOQ		0.001
Sabinene Hydrate	<LOQ		0.001	Linalool	<LOQ		0.001	Isoborneol	<LOQ		0.001
trans-beta-Ocimene	<LOQ		0.001	Linalool	<LOQ		0.001	Nerol	<LOQ		0.001
				Pulegone	<LOQ		0.001	Sabinene	<LOQ		0.001
				Terpineol	<LOQ		0.001	Terpinolene	<LOQ		0.001
				trans-Caryophyllene	<LOQ		0.001	trans-Nerolidol	<LOQ		0.001
								Valencene	<LOQ		0.001

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Pesticides (Passed)

(LCMS/MS)

Analyte	Action Level (ppb)	Result (ppb)	LOQ (ppb)	Analyte	Action Level (ppb)	Result (ppb)	LOQ (ppb)	Analyte	Action Level (ppb)	Result (ppb)	LOQ (ppb)
Abamectin	300	<LOQ	28.23	Acephate	3000	<LOQ	30	Acequinocyl	2000	<LOQ	48
Acetamiprid	3000	<LOQ	30	Aldicarb	100	<LOQ	30	Azoxystrobin	3000	<LOQ	10
Bifenazate	3000	<LOQ	30	Bifenthrin	500	<LOQ	30	Chlorfenapyr	100	<LOQ	48
Chlorpyrifos	100	<LOQ	30	Clofentezine	500	<LOQ	30	Coumaphos	100	<LOQ	30
Cyfluthrin	1000	<LOQ	30	Cypermethrin	1000	<LOQ	30	Daminozide	100	<LOQ	30
DDVP(Dichlorvos)	100	<LOQ	30	Diazinon	200	<LOQ	30	Dimethoate	100	<LOQ	30
Dimethomorph	3000	<LOQ	30	Ethoprop(hos)	100	<LOQ	30	Etofenprox	100	<LOQ	30
Etoxazole	1500	<LOQ	30	Fenhexamid	3000	<LOQ	30	Fenoxycarb	100	<LOQ	30
Fipronil	100	<LOQ	30	Fonicamid	2000	<LOQ	30	Fludioxonil	3000	<LOQ	30
Hexythiazox	2000	<LOQ	30	Imazalil	100	<LOQ	30	Imidacloprid	3000	<LOQ	30
Kresoxim Methyl	1000	<LOQ	30	Malathion A	2000	<LOQ	30	Metalaxyl	3000	<LOQ	10
Methiocarb	100	<LOQ	30	Methomyl	100	<LOQ	30	Mevinphos	100	<LOQ	30
Myclobutanil	3000	<LOQ	30	Naled	500	<LOQ	30	Oxamyl	500	<LOQ	30
Paclobutrazol	100	<LOQ	30	Parathion-methyl	100	<LOQ	48	Pentachloronitrobenzene	200	<LOQ	30
Permethrin	1000	<LOQ	30	Phosmet	200	<LOQ	30	Piperonylbutoxide	3000	<LOQ	30
Prallethrin	400	<LOQ	30	Propiconazole	1000	<LOQ	30	Propoxur	100	<LOQ	30
Pyrethrins	1000	<LOQ	30	Pyridaben	3000	<LOQ	30	Spinetoram	3000	<LOQ	30
Spinosyn A	3000	<LOQ	30	Spinosyn D	3000	<LOQ	30	Spiromesifen	3000	<LOQ	30
Spirotetramat	3000	<LOQ	30	Spiroxamine	100	<LOQ	30	Tebuconazole	1000	<LOQ	30
Thiacloprid	100	<LOQ	30	Thiamethoxam	1000	<LOQ	30	Trifloxystrobin	3000	<LOQ	30

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