

Certificate of Analysis

Order #: MAS191219-010076

Order Date: 2019-12-19

Collection Date: 2019-12-19

Report Date: 2019-12-27

Batch #: t-29419-b11

Sample #: AAAA614

Specimen Type: CBD/HEMP Derivative Products

Extracted From: n/a

Description: n/a

Method: SOP-3



Potency
Tested

Residual Solvents
Passed

Heavy Metals
Passed

Mycotoxins
Passed

Pathogenic
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
3.274%

THC Total
0.151%

CBG Total
0.031%

CBN Total
Not Detected

Other Cannabinoids Total
0.107%

Total Detected Cannabinoids
3.563%

Potency - 11 (Tested)

Analyte	Result (mg/g)	(%)	LOQ (%)
CBC	1.074	0.107	0.001
CBDV	<LOQ		0.001
CBN	<LOQ		0.001
THCA-A	<LOQ		0.001
Total THC	1.506	0.151	0.001

(HPLC)

Analyte	Result (mg/g)	(%)	LOQ (%)
CBD	32.740	3.274	0.001
CBG	0.306	0.031	0.001
Delta-8-THC	<LOQ		0.001
THCV	<LOQ		0.001
CBDA	<LOQ		0.001
CBGA	<LOQ		0.001
Delta-9-THC	1.506	0.151	0.001
Total CBD	32.740	3.274	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

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.

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>

License No. 800025015
CLIA No. 10D1094068

Certificate of Analysis

Order #: MAS191219-010076

Order Date: 2019-12-19

Collection Date: 2019-12-19

Report Date: 2019-12-27

Batch #: t-29419-b11

Sample #: AAAA614

Specimen Type: CBD/HEMP Derivative Products

Extracted From: n/a

Description: n/a

Method: SOP-3



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	<LOQ	87.9	Benzene	1.6	<LOQ	1.6	Chloroform	53	<LOQ	53
Ethanol	5000	<LOQ	26.7	Hexane	60	<LOQ	36.6	I-Butane	5000	<LOQ	100
Isopropanol	5000	<LOQ	52.3	Methanol	3000	<LOQ	87.9	N-Butane	5000	<LOQ	200
Pentane	5000	<LOQ	389.5	Toluene	890	<LOQ	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)	200	<LOQ	100	Cadmium (Cd)	200	<LOQ	100	Lead (Pb)	500	<LOQ	100
Mercury (Hg)	100	<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

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.

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>

License No. 800025015
CLIA No. 10D1094068

Certificate of Analysis

Order #: MAS191219-010076

Order Date: 2019-12-19

Collection Date: 2019-12-19

Report Date: 2019-12-27

Batch #: t-29419-b11

Sample #: AAAA614

Specimen Type: CBD/HEMP Derivative Products

Extracted From: n/a

Description: n/a

Method: SOP-3



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

(qPCR)

Analyte	Result
Listeria	Absence

Terpenes - FL (Tested)

Analyte	Result (mg/g)	(%)	LOQ (%)
(+)-Cedrol	<LOQ	0.001	
Alpha-Bisabolol	<LOQ	0.001	
alpha-Phellandren-e	<LOQ	0.001	
Borneol	<LOQ	0.001	
Caryophyllene oxide	<LOQ	0.001	
Fenchone	<LOQ	0.001	
Geraniol	<LOQ	0.001	
Hexahydrothymol	<LOQ	0.001	
Linalool	<LOQ	0.001	
Pulegone	<LOQ	0.001	
Terpineol	<LOQ	0.001	
trans-Nerolidol	<LOQ	0.001	

Analyte	Result (mg/g)	(%)	LOQ (%)
(R)-(+)-Limonene	<LOQ	0.001	
alpha-Cedrene	<LOQ	0.001	
alpha-Pinene	<LOQ	0.001	
beta-Myrcene	<LOQ	0.001	
Camphene	<LOQ	0.001	
cis-Nerolidol	<LOQ	0.001	
Farnesene	<LOQ	0.001	
Fenchyl Alcohol	<LOQ	0.001	
Geranyl acetate	<LOQ	0.001	
Isoborneol	<LOQ	0.001	
Nerol	<LOQ	0.001	
Sabinene	<LOQ	0.001	
Terpinolene	<LOQ	0.001	
Valencene	<LOQ	0.001	

(GC/GCMS)

Analyte	Result (mg/g)	(%)	LOQ (%)
3-Carene	<LOQ	0.001	
alpha-Humulene	<LOQ	0.001	
alpha-Terpinene	<LOQ	0.001	
beta-Pinene	<LOQ	0.001	
Camphors	<LOQ	0.001	
Eucalyptol	<LOQ	0.001	
Farnesene	<LOQ	0.001	
gamma-Terpinene	<LOQ	0.001	
Guaiol	<LOQ	0.001	
Isopulegol	<LOQ	0.001	
Ocimene	<LOQ	0.001	
Sabinene Hydrate	<LOQ	0.001	
trans-Caryophyllene	<LOQ	0.001	

(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

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.

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>

License No. 800025015
CLIA No. 10D1094068

Certificate of Analysis

Order #: MAS191219-010076

Order Date: 2019-12-19

Collection Date: 2019-12-19

Report Date: 2019-12-27

Batch #: t-29419-b11

Sample #: AAAA614

Specimen Type: CBD/HEMP Derivative Products

Extracted From: n/a

Description: n/a

Method: SOP-3



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	100	<LOQ	28.23	Acephate	100	<LOQ	30	Acequinocyl	100	<LOQ	48
Acetamiprid	100	<LOQ	30	Aldicarb	100	<LOQ	30	Azoxystrobin	10	<LOQ	10
Bifenazate	100	<LOQ	30	Bifenthrin	100	<LOQ	30	Chlorfenapyr	100	<LOQ	48
Chlorpyrifos	100	<LOQ	30	Clofentezine	200	<LOQ	30	Coumaphos	100	<LOQ	30
Cyfluthrin	100	<LOQ	30	Cypermethrin	500	<LOQ	30	Daminozide	100	<LOQ	30
DDVP(Dichlorvos)	100	<LOQ	30	Diazinon	100	<LOQ	30	Dimethoate	100	<LOQ	30
Dimethomorph	200	<LOQ	30	Ethoprop(hos)	100	<LOQ	30	Etofenprox	100	<LOQ	30
Etoxazole	100	<LOQ	30	Fenhexamid	100	<LOQ	30	Fenoxycarb	100	<LOQ	30
Fipronil	100	<LOQ	30	Flonicamid	100	<LOQ	30	Fludioxonil	100	<LOQ	30
Hexythiazox	100	<LOQ	30	Imazalil	100	<LOQ	30	Imidacloprid	400	<LOQ	30
Kresoxim Methyl	100	<LOQ	30	Malathion A	200	<LOQ	30	Metalaxyl	20	<LOQ	10
Methiocarb	50	<LOQ	30	Methomyl	100	<LOQ	30	Mevinphos	100	<LOQ	30
Myclobutanil	100	<LOQ	30	Naled	250	<LOQ	30	Oxamyl	500	<LOQ	30
Paclobutrazol	100	<LOQ	30	Parathion-methyl	100	<LOQ	48	Pentachloronitrobenzene	150	<LOQ	30
Permethrin	100	<LOQ	30	Phosmet	100	<LOQ	30	Piperonylbutoxide	3000	<LOQ	30
Prallethrin	100	<LOQ	30	Propiconazole	100	<LOQ	30	Propoxur	100	<LOQ	30
Pyrethrins	1000	<LOQ	30	Pyrethrins	500	<LOQ	30	Pyridaben	200	<LOQ	30
Spinetoram	200	<LOQ	30	Spinosyn A	100	<LOQ	30	Spinosyn D	100	<LOQ	30
Spiromesifen	100	<LOQ	30	Spirotetramat	100	<LOQ	30	Spiroxamine	100	<LOQ	30
Tebuconazole	100	<LOQ	30	Thiacloprid	100	<LOQ	30	Thiamethoxam	500	<LOQ	30
Trifloxystrobin	100	<LOQ	30								

(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

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.

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>

License No. 800025015
 CLIA No. 10D1094068