

CERTIFICATE OF ANALYSIS

ACS LABORATORY

CERTIFIED
CANNABIS & CBD
TESTED SAFE
oalobc:onnobis.com

Customer: Louisville, KY 40223

Order #: 709145
Batch #: 19T3000
Order Date: 11/19/2019
Collection Date: 11/19/2019
Report Date: 11/25/2019

Specimen Type: Extract
Description:
Method: SOP-3

Initial Gross Weight: 1701300(mg)
Specimen Weight: 11626(mg)

Potency - 11 (HPLC)											
Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)
CBC		ND	0.001	CBD	122.800	12.280	0.001	CBDA		ND	0.001
CBDV	0.342	0.034	0.001	CBG	0.265	0.026	0.001	CBGA		ND	0.001
CBN		ND	0.001	Delta-8-THC		ND	0.001	Delta-9-THC	1.190	0.119	0.001
THCA-A		ND	0.001	THCV	0.206	0.021	0.001	Total CBD	122.800	12.280	0.001
Total THC	1.190	0.119	0.001								

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	100.000	<LOQ	30.000	Aceohate	100.000	<LOQ	30.000	Acequinocyl	100.000	<LOQ	480.000
Acetamidrid	100.000	<LOQ	30.000	Aldicarb	50.000	<LOQ	30.000	Azoxystrobin	50.000	<LOQ	30.000
Bifenazate	100.000	<LOQ	30.000	Bifenthrin	100.000	<LOQ	30.000	Chlorfenapyr	50.000	<LOQ	30.000
Chlorovrifos	100.000	<LOQ	30.000	Clofentazine	200.000	<LOQ	30.000	Coumaphos	50.000	<LOQ	30.000
Cuthrin	100.000	<LOQ	30.000	Cypermethrin	500.000	<LOQ	30.000	Daminozide	500.000	<LOQ	30.000
D VP(Oichlorvosl)	100.000	<LOQ	30.000	Diazinon	50.000	<LOQ	30.000	Dimethoate	50.000	<LOQ	30.000
Dimethomorph	50.000	<LOQ	30.000	Ethoprop(hosl)	50.000	<LOQ	30.000	Etofenprox	50.000	<LOQ	30.000
Etoazole	50.000	<LOQ	30.000	Fenhexamid	100.000	<LOQ	30.000	Fenoxycarb	50.000	<LOQ	30.000
Fipronil	50.000	<LOQ	30.000	Fonicamid	400.000	<LOQ	30.000	Fludioxonil	100.000	<LOQ	30.000
Hexythiazox	250.000	<LOQ	30.000	Imazalil	100.000	<LOQ	30.000	Imidacloprid	100.000	<LOQ	30.000
Kresoxim Methyl	100.000	<LOQ	30.000	Malathion A	50.000	<LOQ	30.000	Metalaxyl	50.000	<LOQ	30.000
Methiocarb	50.000	<LOQ	30.000	Methomyl	100.000	<LOQ	30.000	Mevinphos	50.000	<LOQ	30.000
Myclobutanil	100.000	<LOQ	30.000	Naled	250.000	<LOQ	30.000	Oxamyl	250.000	<LOQ	30.000
Paclobutrazol	50.000	<LOQ	30.000	Parathion-methyl	100.000	<LOQ	30.000	Pentachloronitrobenzene	50.000	<LOQ	30.000
Permethrin	100.000	<LOQ	30.000	Phosmet	100.000	<LOQ	30.000	Piperonylbutoxide	300.000	<LOQ	30.000
Prallethrin	100.000	<LOQ	30.000	Propiconazole	100.000	<LOQ	30.000	Prooxur	100.000	<LOQ	30.000
Pyrethrins	500.000	<LOQ	30.000	Pvndaben	200.000	<LOQ	30.000	Spinetoram	200.000	<LOQ	30.000
Soinosvn A	100.000	<LOQ	30.000	Spinosyn D	100.000	<LOQ	30.000	Soiromesifen	100.000	<LOQ	30.000
SRirotetramat	100.000	<LOQ	30.000	Spiroxamine	50.000	<LOQ	30.000	Tebuconazole	50.000	<LOQ	30.000
T iacloprid	50.000	<LOQ	30.000	Thiamethoxam	50.000	<LOQ	30.000	Trifloxystrobin	100.000	<LOQ	30.000



Xueli Gao, Ph.D., DABT
Lab Toxicologist

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

* Total CBD = CBD + (CBD-A * 0.877). Total THC = THCA-A * 0.877 + Delta 9 THC. ND = <LOQ, T-Caryophyllene = Trans-Caryophyllene, <LOQ = Less Than Limit of Quantitation, QNS = Quantity Not Sufficient (%), Percent, (ppm) = Parts per Million, (ppb) = Parts per Billion, (µg/Kg) = Microgram per Kilogram, (mg/g) = Milligram per Gram, ppm = (µg/g), ppb = (µg/kg).

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Sun City Center, FL - 33573

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

E: info@acslabcannabis.com License No. 800025015
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CERTIFICATE OF ANALYSIS

ACS LABORATORY

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Customer: Louisville, KY 40223

Order #: 709145
Batch #: 19T3000
Order Date: 11/19/2019
Collection Date: 11/19/2019
Report Date: 11/25/2019

Specimen Type: Extract
Description:
Method: SOP-3

Initial Gross Weight: 17013.00(mg)
Specimen Weight: 116.26(mg)

Residual Solvents (Passed)

Residual Solvents (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	5,000.000	<LOQ	87.900	Benzene	1,600	<LOQ	1,600	Chloroform	53,000	<LOQ	53,000
Ethanol	5,000.000	<LOQ	26.700	Hexane	60,000	<LOQ	36,600	I-Butane	5,000.000	<LOQ	100,000
Isopropanol	5,000.000	<LOQ	52.300	Methanol	3,000.000	<LOQ	87.900	N-Butane	5,000.000	<LOQ	200,000
Pentane	5,000.000	<LOQ	389.500	Toluene	890,000	<LOQ	38.400				

Microbiolof (qPcRr 1 Passn f@Ni

Microbiolof (qPcRr 1 Passn f@Ni		ma;		JM		Ki1H		M (qPCR)	
Total Aerobic Count	Passed	Total Coliform		P115sed		Total Enterobacteriaceae		Passed	
TOU11YeaVMold	Passed								

Heavy Metals (Passed)

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)	500.000	<LOQ	100.000	Cadmium (Cd)	500.000	<LOQ	100.000	Lead (Pb)	500.000	<LOQ	100.000
Mercury (Hg)	500.000	<LOQ	100.000								

Xueli Gao
Xueli Gao, Ph.D., DABT
Lab Toxicologist

Aixia Sun
Aixia Sun, D.H.Sc., M.Sc., B.Sc., MT (AAE)
Principal Scientist

* Total CBD = CBD + (CBDA * 0.877) Total THC = THCA-A * 0.877 + Delta 9 THC. ND = <LOQ. T-Caryophyllene = Trans-Caryophyllene. <LOQ = Less Than 1 mg/g. Quantitation. QNS = Quantity Not Sufficient. (%) = Percent (ppm) = Parts per Million (ppb) = Parts per Billion. (µg/Kg) = Microgram per Kilogram. (mg/g) = Milligram per Gram. ppm = (µg/g), ppb = (µg/kg).

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CERTIFICATE OF ANALYSIS

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4:9191

Customer: Louisville, KY 40223

Order #: 709146
Batch #: 19T500
Order Date: 11/19/2019
Collection Date: 11/19/2019
Report Date: 11/25/2019

Specimen Type: Extract
Description:
Method: SOP-3

Initial Gross Weight: 16423.00(mg)
Specimen Weight: 11671(mg)

Potency - 11 (HPLC)											
Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)
CBC		ND	0.001	CBD	42.850	4.285	0.001	CBDA		ND	0.001
CBDV		ND	0.001	CBG	0.275	0.027	0.001	CBGA		ND	0.001
CBN		ND	0.001	Delta-8-THC		ND	0.001	Delta-9-THC	121.2	0.121	0.001
THCA-A		ND	0.001	THCV	0.231	0.023	0.001	Total CBD	42.850	4.285	0.001
Total THC	1.212	0.121	0.001								

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	100,000	<LOQ	30,000	Acephate	100,000	<LOQ	30,000	Acequinocyl	100,000	<LOQ	48,000
Acetamiprid	100,000	<LOQ	30,000	Aldicarb	50,000	<LOQ	30,000	Azoxystrobin	50,000	<LOQ	30,000
Bifenazate	100,000	<LOQ	30,000	Bifenthrin	100,000	<LOQ	30,000	Chlorfenapyr	50,000	<LOQ	30,000
Chloroform	100,000	<LOQ	30,000	Clofentezine	200,000	<LOQ	30,000	Coumatalos	50,000	<LOQ	30,000
Cuthrin	100,000	<LOQ	30,000	Cypermethrin	500,000	<LOQ	30,000	Daminozide	500,000	<LOQ	30,000
DVP(Dichloromethyl)	100,000	<LOQ	30,000	Diazinon	50,000	<LOQ	30,000	Dimethoate	50,000	<LOQ	30,000
Imidacloprid	50,000	<LOQ	30,000	Ethionex	50,000	<LOQ	30,000	Etofenprox	50,000	<LOQ	30,000
Imidacloprid	50,000	<LOQ	30,000	Fenhexamid	100,000	<LOQ	30,000	Fenoxycarb	50,000	<LOQ	30,000
Imidacloprid	50,000	<LOQ	30,000	Flonacamid	400,000	<LOQ	30,000	Fludoxonil	100,000	<LOQ	30,000
Imidacloprid	250,000	<LOQ	30,000	Imazalil	100,000	<LOQ	30,000	Imidacloprid	100,000	<LOQ	30,000
Imidacloprid	100,000	<LOQ	30,000	Malathion	50,000	<LOQ	30,000	Metalaxyl	50,000	<LOQ	30,000
Imidacloprid	50,000	<LOQ	30,000	Methomyl	100,000	<LOQ	30,000	Methomyl	50,000	<LOQ	30,000
Imidacloprid	100,000	<LOQ	30,000	Naled	250,000	<LOQ	30,000	Oxamyl	250,000	<LOQ	30,000
Imidacloprid	50,000	<LOQ	30,000	Parathion-methyl	100,000	<LOQ	30,000	Pentachloronitrobenzene	50,000	<LOQ	30,000
Imidacloprid	100,000	<LOQ	30,000	Phosmet	100,000	<LOQ	30,000	Piperonylbutoxide	3,000,000	<LOQ	30,000
Imidacloprid	100,000	<LOQ	30,000	Propiconazole	100,000	<LOQ	30,000	Prooxur	100,000	<LOQ	30,000
Imidacloprid	500,000	<LOQ	30,000	Pyrindaben	200,000	<LOQ	30,000	Spinetoram	200,000	<LOQ	30,000
Imidacloprid	100,000	<LOQ	30,000	Spinosyn D	100,000	<LOQ	30,000	Spiromesifen	100,000	<LOQ	30,000
Imidacloprid	100,000	<LOQ	30,000	Spiroxamine	50,000	<LOQ	30,000	Tebuconazole	50,000	<LOQ	30,000
Imidacloprid	50,000	<LOQ	30,000	Thaamethoxam	50,000	<LOQ	30,000	Traostobrom	100,000	<LOQ	30,000

Xueli Gao, Ph.D., DABT
Lab Toxicologist

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

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Customer: Louisville, KY 40223

Order #: 709146	Specimen Type: Extract	Initial Gross Weight 16423.00(mg)
Batch #: 19T500	Description:	Specimen Weight 116.71(mg)
Order Date: 11/19/2019	Method: SOP-3	
Collection Date: 11/19/2019		
Report Date: 11/25/2019		

Residual Solvents (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	5,000.000	<LOQ	87.900	Benzene	1.600	<LOQ	1.600	Chloroform	53.000	<LOQ	53.000
Bhanol	5,000.000	<LOQ	26.700	Hexane	60.000	<LOQ	36.600	I-Butane	5,000.000	<LOQ	100.000
Isopropanol	5,000.000	<LOQ	52.300	Methanol	3,000.000	<LOQ	87.900	N-Butane	5,000.000	<LOQ	200.000
Pentane	5,000.000	<LOQ	389.500	Toluene	890.000	<LOQ	38.400				


Microbiology (QPCR) (Passed) (qPCR)

Analyte	Remark	Analyte	Remark	Analyte	Remark
Total Aerobic Count	Passed	Total Coliform	Passed	Total Enterobacteriaceae	Passed
Total Yeast/LMold	Passed				

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)	500.000	<LOQ	100.000	Cadmium (Cd)	500.000	<LOQ	100.000	Lead (Pb)	500.000	<LOQ	100.000
Mercury (Hg)	500.000	<LOQ	100.000								


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