



CERTIFICATE OF ANALYSIS



Customer: CBD LION LLC - MUNDELEIN, IL 60060

Order #: 708274
Batch #: 752-5073B
Order Date: 10/29/2019
Collection Date: 10/29/2019
Report Date: 11/05/2019

Specimen Type: Extract
Description: CRYSTAL RESISTANT DISTILATE
Extracted From: Hemp
Method: SOP-3

Initial Gross Weight: 14623.00(mg)
Specimen Weight: 101.81(mg)
Net Weight: 5025.3(mg)

Potency - 11 Details

Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)
CBC	82.660	8.266	0.001	CBD	387.200	38.720	0.001	CBDA	33.770	3.377	0.001
CBDV		ND	0.001	CBG	25.370	2.537	0.001	CBGA	0.867	0.087	0.001
CBN	69.910	6.991	0.001	Delta-8-THC		ND	0.001	Delta-9-THC		ND	0.001
THCA-A		ND	0.001	THCV		ND	0.001	Total CBD	416.816	41.682	0.001
Total THC		ND	0.001								

Potency - 11 Totals

Analyte	Result (mg)	(%)
CBD Total	2094.627	41.682
THC Total	ND	ND
CBG Total	131.315	2.613
CBN Total	351.319	6.991
Other Cannabinoids Total	415.391	8.266
Total Detected Cannabinoids	2992.652	59.552

Pesticides (Passed)

Analyte	Action Level (ppm)	Result (ppm)	LOQ (ppm)	Analyte	Action Level (ppm)	Result (ppm)	LOQ (ppm)	Analyte	Action Level (ppm)	Result (ppm)	LOQ (ppm)
Abamectin	0.500	<LOQ	0.100	Acephate	0.400	<LOQ	0.100	Acequinocyl	2.000	<LOQ	0.750
Acetamiprid	0.200	<LOQ	0.100	Aldicarb	0.400	<LOQ	0.100	Azoxystrobin	0.200	<LOQ	0.100
Bifenazate	0.200	<LOQ	0.100	Bifenthrin	0.200	<LOQ	0.100	Boscalid	0.400	<LOQ	0.100
Carbaryl	0.200	<LOQ	0.100	Carbofuran	0.200	<LOQ	0.100	Chlorantraniliprole	0.200	<LOQ	0.100
Chlorpyrifos	0.200	<LOQ	0.100	Clofentazine	0.200	<LOQ	0.100	Cypermethrin	1.000	<LOQ	0.100
Daminozide	1.000	<LOQ	0.100	Diazinon	0.200	<LOQ	0.100	Dichlorvos	0.100	<LOQ	0.100
Dimethoate	0.200	<LOQ	0.100	Ethoprophos	0.200	<LOQ	0.100	Etofenprox	0.400	<LOQ	0.100
Etoxazole	0.200	<LOQ	0.100	Fenoxycarb	0.200	<LOQ	0.100	Fipronil	0.400	<LOQ	0.100
Fonicamid	1.000	<LOQ	0.100	Fludioxonil	0.400	<LOQ	0.100	Hexythiazox	1.000	<LOQ	0.100
Imazalil	0.200	<LOQ	0.100	Imidacloprid	0.400	<LOQ	0.100	Kresoxim Methyl	0.400	<LOQ	0.100
Malathion A	0.200	<LOQ	0.100	Metalaxyl	0.200	<LOQ	0.100	Methiocarb	0.200	<LOQ	0.100
Methomyl	0.400	<LOQ	0.100	MGK-264	0.200	<LOQ	0.100	Myclobutanil	0.200	<LOQ	0.100
Naled	0.500	<LOQ	0.100	Oxamyl	1.000	<LOQ	0.100	Paclobutrazol	0.400	<LOQ	0.100
Parathion-methyl	0.200	<LOQ	0.250	Permethrin	0.200	<LOQ	0.100	Phosmet	0.200	<LOQ	0.100
Piperonylbutoxide	2.000	<LOQ	0.100	Prallethrin	0.200	<LOQ	0.100	Propiconazole	0.400	<LOQ	0.100
Propoxur	0.200	<LOQ	0.100	Pyrethrins	1.000	<LOQ	0.100	Pyridaben	0.200	<LOQ	0.100
Spinosyn A	0.200	<LOQ	0.100	Spinosyn D	0.200	<LOQ	0.100	Spiromesifen	0.200	<LOQ	0.100
Spirotetramat	0.200	<LOQ	0.100	Spiroxamine	0.400	<LOQ	0.100	Tebuconazole	0.400	<LOQ	0.100
Thiacloprid	0.200	<LOQ	0.100	Thiamethoxam	0.200	<LOQ	0.100	Trifloxystrobin	0.200	<LOQ	0.100

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, *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, *Total (mg) = Total (%) + 100 * Net Weight(mg), 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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Initial Gross Weight: 14623.00(mg)
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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				

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								

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	6.000	Aflatoxin B2		<LOQ	6.000	Aflatoxin G1		<LOQ	6.000
Aflatoxin G2		<LOQ	6.000	Aflatoxin Total	20.000	<LOQ	6.000	Ochratoxin A	20.000	<LOQ	12.000

Moisture

Analyte	Result (%)
Moisture	1.400

(Moisture Meter)

Pathogenic Microbiology (Passed)

				(Micro Array)	
Analyte	Result	Analyte	Result	Analyte	Result
Aspergillus Flavus	Absence	Aspergillus Fumigatus	Absence	Aspergillus Niger	Absence
Aspergillus Terreus	Absence	Salmonella	Absence	STEC E. Coli	Absence

Water Activity (Passed)

Analyte	Action Level (aw)	Result (aw)
Water Activity	0.850	0.403

(AquaLab 4TE)

Filth and Foreign Material (Passed)

						(Electronic Balance)		
Analyte	Action Level (area ratio)	Result (area ratio)	Analyte	Action Level (mg/Kg)	Result (mg/Kg)	Analyte	Action Level (%)	Result (%)
Covered Area	0.250	0.000	Feces	0.500	0.000	Weight %	5.000	0.000

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