

CERTIFICATE OF ANALYSIS



Customer: HRC LLC - Scottsdale, AZ 85260

Order #: 703588 Batch #: 0119220B2 Order Date: 08/12/2019 Collection Date: 08/12/2019 Report Date: 08/29/2019	Specimen Type: Extract Description: 33mg/mL Full Spectrum CBD Oil Tincture Extracted From: Industrial Hemp Method: SOP-3	Initial Gross Weight: 8623.00(mg) Specimen Weight: 96.42(mg) Net Weight: 2211.4(mg) Density: 0.9421(g/ml)
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Potency Details

						(HPLC)		
Analyte	Result (mg/ml)	LOQ (%)	Analyte	Result (mg/ml)	LOQ (%)	Analyte	Result (mg/ml)	LOQ (%)
CBC	1.591	0.159	CBCA	ND	0.001	CBD	34.754	3.475
CBDA	ND	0.001	CBDV	0.334	0.033	CBDVA	ND	0.001
CBG	0.692	0.069	CBGA	ND	0.001	CBL	ND	0.001
CBN	ND	0.001	CBNA	0.305	0.030	Delta-8-THC	ND	0.001
Delta-9-THC	1.933	0.193	THCA-A	ND	0.001	THCV	ND	0.001
THCVA	ND	0.001	Total CBD	34.754	3.475	Total THC	1.933	0.193

Potency Totals

Analyte	Result (mg)	(%)
CBD Total	81.579	3.689
THC Total	4.533	0.205
CBG Total	1.614	0.073
CBN Total	0.619	0.028
Other Cannabinoids Total	4.511	0.204
Total Detected Cannabinoids	92.879	4.200

Pesticides (Passed)

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

Thomas Farrell, MD
Lab Director

* 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 + THCVA, *Total Detected Cannabinoids = CBD Total + CBG Total + CBN Total + THC Total + CBC + CBDV + THCV + THCVA, *Total (mg) = Total (%) * 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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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	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	15.000	Aflatoxin B2		<LOQ	15.000	Aflatoxin G1		<LOQ	15.000
Aflatoxin G2		<LOQ	15.000	Aflatoxin Total	20.000	<LOQ	15.000	Ochratoxin A	20.000	<LOQ	15.000

Terpenes				(GC/GCMS)							
Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)	Analyte	Result (mg/g)	(%)	LOQ (%)
3-Carene		ND	0.001	Alpha-Bisabolol		ND	0.001	Alpha-Pinene		ND	0.002
Alpha-Terpinene		ND	0.001	Alpha-Terpineol		ND	0.001	Aromadendrene		ND	0.001
Beta-Myrcene		ND	0.001	Beta-Pinene		ND	0.001	Camphene		ND	0.001
Fenchol		ND	0.002	Gamma-Terpinene		ND	0.001	Gamma-Terpineol		ND	0.002
Geraniol		ND	0.001	Guaiol		ND	0.001	Humulene		ND	0.001
Isopulegol		ND	0.001	Linalool		ND	0.001	Nerolidol-1		ND	0.001
Nerolidol-2		ND	0.001	Ocimene-1		ND	0.001	Ocimene-2		ND	0.001
P-Cymene		ND	0.001	R-Limonene		ND	0.000	Terpinolene		ND	0.001
Trans-Caryophyllene	0.423	0.042	0.001								

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Microbiology (qPCR) (Passed) (qPCR)

Analyte	Result	Analyte	Result	Analyte	Result
Total Aerobic Count	Passed	Total Coliform	Passed	Total Enterobacteriaceae	Passed
Total Yeast/Mold	Passed				

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