

KCA Laboratories 232 North Plaza Drive Nicholasville, KY 40356

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2500mg/30ml Hemp Oil Extract

Sample ID: SA-230112-15658 Batch: December 2022 Type: Finished Products Matrix: Oil / Liquid - Hemp Seed Oil Jnit Mass (g):		Collected: 01/12/2023 Received: 01/17/2023 Completed: 01/26/2023		Client GrassRoots Harvest 321 W. Ben White Blvd Austin, TX 78704 USA Lic. #: 2202-1417	
			Summary Test Cannabinoids	Date Tested 01/26/2023	Status Tested
	Concession and the second seco				
2.07 mg/mL	83.6 mg/mL	90.8 mg/mL	Not Tested	Not Tested	Yes
Total ∆9-THC	Total CBD	Total Cannabinoids	Moisture Content	Foreign Matter	Internal Standard Normalization
		Total Cannabinoids		Foreign Matter	
				Foreign Matter Result (%)	
annabinoids	by HPLC-PDA, I	LC-MS/MS, and	or GC-MS/MS	Result	Normalization
annabinoids _{nalyte}	by HPLC-PDA, I LOD (mg/mL)	LC-MS/MS, and LOQ (mg/mL)	/or GC-MS/MS Result (mg/mL)	Result (%)	Result (mg/unit)
annabinoids nalyte BC BCA	by HPLC-PDA, I LOD (mg/mL) 0.00095	LC-MS/MS, and LOQ (mg/mL) 0.00284	/or GC-MS/MS Result (mg/mL) 1.54	Result (%) 0.169	Result (mg/unit) 46.2
annabinoids nalyte 3C 3CA 3CV	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543	/or GC-MS/MS Result (mg/mL) 1.54 ND	Result (%) 0.169 ND	Result (mg/unit) 46.2 ND
annabinoids nalyte BC BCA BCV BD	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018	/or GC-MS/MS Result (mg/mL) 1.54 ND ND	Result (%) 0.169 ND ND	Result (mg/unit) 46.2 ND ND
annabinoids nalyte BC BCA BCA BC BD BDA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242	/or GC-MS/MS Result (mg/mL) 1.54 ND ND 83.6	Result (%) 0.169 ND ND 9.20	Result (mg/unit) 46.2 ND ND 2510
annabinoids nalyte BC BCA BCA BCA BDA BDA BDA BDV	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063	/or GC-MS/MS Result (mg/mL) 1.54 ND ND 83.6 ND	Result (%) 0.169 ND ND 9.20 ND	Normalization Result (mg/unit) 46.2 ND ND 2510 ND
annabinoids nalyte BC BCA BCA BCV BD BDA BDV BDVA BGVA BG	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235	Normalization Result (mg/unit) 46.2 ND ND 2510 ND 7.00 ND 64.2
annabinoids nalyte BC BCA BCA BCV BD BDA BDA BDV BDVA BGA BGA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057 0.00049	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235 ND	Normalization Result (mg/unit) 46.2 ND ND 2510 ND 7.00 ND 64.2 ND
annabinoids nalyte BC BCA BCA BCV BDA BDA BDA BDA BDA BDA BDA BDA BDA BDA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235 ND 0.0114	Normalization Result (mg/unit) 46.2 ND ND 2510 ND 7.00 ND 64.2 ND 64.2 ND 3.10
annabinoids nalyte BC BCA BCA BCV BDA BDA BDA BDV BDVA BGA BGA BL BLA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00021 0.00057 0.00049 0.00112 0.00124	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235 ND 0.235 ND 0.0114 ND	Normalization Result (mg/unit) 46.2 ND ND 2510 ND 7.00 ND 64.2 ND 64.2 ND 3.10 ND
annabinoids nalyte BC BCA BCA BCV BDA BDA BDA BDA BDA BDA BDA BDA BCA BCA BL BLA BN	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112 0.00124 0.00056	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371 0.00169	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND 0.415	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235 ND 0.235 ND 0.0114 ND 0.01456	Normalization Result (mg/unit) 46.2 ND 2510 ND 2510 ND 7.00 ND 64.2 ND 3.10 ND 12.4
annabinoids nalyte BC BCA BCA BCV BDA BDA BDA BDA BDA BDA BCA BCA BL BLA BLA BN BNA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112 0.00124 0.00056 0.0006	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371 0.00169 0.00181	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND 0.103 ND 0.415 ND	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235 ND 0.0114 ND 0.0114 ND 0.0456 ND	Result (mg/unit) 46.2 ND 2510 ND 2510 ND 3.10 ND 12.4 ND
annabinoids nalyte BC BCA BCA BCA BCA BCA BDA BDA BDA BDA BCA BCA BL BLA BLA BLA BLA BLA BLA BLA BLA BLA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112 0.00124 0.00056 0.0006 0.0018	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371 0.00169 0.00181 0.0054	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND 0.415 ND 0.669	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235 ND 0.0114 ND 0.0114 ND 0.0456 ND 0.0736	Normalization Result (mg/unit) 46.2 ND 2510 ND 2510 ND 7.00 ND 64.2 ND 3.10 ND 12.4 ND 20.1
annabinoids nalyte BC BCA BCA BCA BCA BCA BCA BDA BDA BDA BCA BCA BLA BLA BLA BLA BLA BLA BLA BLA BLA BL	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112 0.00124 0.00056 0.0006 0.0018 0.00104	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371 0.00169 0.00181 0.0054 0.0054 0.00312	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND 0.415 ND 0.415 ND 0.669 ND	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235 ND 0.0114 ND 0.0114 ND 0.0456 ND 0.0736 ND	Result (mg/unit) 46.2 ND 2510 ND 2510 ND 2510 ND 3.10 ND 12.4 ND 20.1
annabinoids nalyte BC BCA BCA BCA BCA BCA BCA BDA BDA BDA BCA BCA BCA BCA BCA BCA BCA BCA BCA BC	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112 0.00124 0.00056 0.0006 0.0018 0.0016 0.0018 0.00104 0.00076	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371 0.00169 0.00181 0.0054 0.00312 0.00027	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND 0.415 ND 0.415 ND 0.669 ND 2.07	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235 ND 0.0114 ND 0.0114 ND 0.0456 ND 0.0736 ND 0.228	Result (mg/unit) 46.2 ND 2510 ND 2510 ND 3.10 ND 12.4 ND 20.1 ND 62.2
annabinoids nalyte BC BCA BCA BCA BCA BCA BCA BDA BDA BDA BDA BCA BCA BA BA BA BA BA BA BA BA BA BA BA BA BA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112 0.00124 0.00056 0.0006 0.0018 0.0006 0.0018 0.00104 0.00104 0.00076 0.00084	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371 0.00169 0.00181 0.0054 0.00312 0.0054 0.00312 0.00227 0.00251	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND 0.415 ND 0.415 ND 0.669 ND 0.669 ND 2.07 ND	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.0256 ND 0.235 ND 0.0114 ND 0.0114 ND 0.0456 ND 0.0736 ND 0.0736 ND 0.228 ND	Result (mg/unit) 46.2 ND 2510 ND 2510 ND 2510 ND 3.10 ND 12.4 ND 20.1 ND 62.2 ND
annabinoids nalyte BC BCA BCA BCA BCA BCA BCA BCA BDA BDA BDA BCA BCA BA BA BA BA BA BA BA BA BA BA BA BA BA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112 0.00124 0.00124 0.00056 0.0006 0.0018 0.00104 0.00104 0.00076 0.00084 0.00069	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371 0.00169 0.00181 0.0054 0.00312 0.0054 0.00312 0.00227 0.00251 0.00206	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND 0.415 ND 0.415 ND 0.669 ND 0.669 ND 2.07 ND ND ND ND 0.207 ND ND	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.0256 ND 0.235 ND 0.0114 ND 0.0456 ND 0.0114 ND 0.0456 ND 0.0736 ND 0.228 ND ND 0.228 ND ND	Result (mg/unit) 46.2 ND 2510 ND 2510 ND 2510 ND 3.10 ND 12.4 ND 20.1 ND 62.2 ND
annabinoids nalyte BC BCA BCA BCA BCA BCA BCA BCA BDA BDA BDA BDA BCA BCA BA BA BA BA BA BA BA BA BA BA BA BA BA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112 0.00124 0.00056 0.0006 0.0018 0.0006 0.0018 0.00104 0.00104 0.00076 0.00084	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371 0.00169 0.00181 0.0054 0.00312 0.0054 0.00312 0.00227 0.00251	/or GC-MS/MS Result (mg/mL) 1.54 ND ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND 0.415 ND 0.415 ND 0.669 ND 0.669 ND 2.07 ND ND ND ND ND ND ND ND ND ND	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.235 ND 0.0114 ND 0.0456 ND 0.0114 ND 0.0456 ND 0.0736 ND 0.228 ND 0.228 ND ND ND ND ND ND ND ND ND ND ND ND ND	Result (mg/unit) 46.2 ND 2510 ND 2510 ND 2510 ND 3.10 ND 12.4 ND 20.1 ND 62.2 ND 20.1 ND 62.2 ND ND ND
annabinoids nalyte BC BCA BCA BCA BCA BCA BCA BCA BDA BDA BDA BCA BCA BA BA BA BA BA BA BA BA BA BA BA BA BA	by HPLC-PDA, I LOD (mg/mL) 0.00095 0.00181 0.0006 0.00081 0.00043 0.00061 0.00021 0.00057 0.00049 0.00112 0.00124 0.00124 0.00056 0.0006 0.0018 0.00104 0.00104 0.00076 0.00084 0.00069	LC-MS/MS, and LOQ (mg/mL) 0.00284 0.00543 0.0018 0.00242 0.0013 0.00182 0.00063 0.00172 0.00147 0.00335 0.00371 0.00169 0.00181 0.0054 0.00312 0.0054 0.00312 0.00227 0.00251 0.00206	/or GC-MS/MS Result (mg/mL) 1.54 ND 83.6 ND 0.233 ND 2.14 ND 0.103 ND 0.415 ND 0.415 ND 0.669 ND 0.669 ND 2.07 ND ND ND ND 0.207 ND ND	Result (%) 0.169 ND ND 9.20 ND 0.0256 ND 0.0256 ND 0.235 ND 0.0114 ND 0.0456 ND 0.0114 ND 0.0456 ND 0.0736 ND 0.228 ND ND 0.228 ND ND	Result (mg/unit) 46.2 ND 2510 ND 2510 ND 2510 ND 3.10 ND 12.4 ND 20.1 ND 62.2 ND

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; RL = Reporting Limit; Δ = Delta; Total Δ 9-THC = Δ 9-THCA * 0.877 + Δ 9-THC; Total CBD = CBDA * 0.877 + CBD;

Generated By: Ryan Bellone CCO Date: 01/26/2023

Tested By: Nicholas Howard Scientist Date: 01/26/2023



This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 170252017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories. KCA Laboratories are norvide measurement uncertainty upon request.