

Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

DATE ISSUED 09/26/2025

SAMPLE DETAILS

SAMPLE NAME: National Balm, FG 15mL

Infused, Non-Inhalable

CULTIVATOR / MANUFACTURER

Business Name: License Number:

Address:

SAMPLE DETAIL

Batch Number: 14292 **Sample ID:** 240215Q029 **DISTRIBUTOR / TESTED FOR**

Business Name: Papa & Barkley CBD

License Number:

Address: PO Box 16297 North Hollywood, CA 91615

Date Collected: 02/15/2024 **Date Received:** 02/16/2024

Batch Size:

Sample Size: 20.0 units Unit Mass: 15 grams per Unit

Serving Size:







Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: 4.665 mg/unit

Total CBD: 206.145 mg/unit

Sum of Cannabinoids: 226.710 mg/unit

Total Cannabinoids: 226.710 mg/unit

Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step: Total THC = Δ^9 -THC + (THCa (0.877))
Total CBD = CBD + (CBDa (0.877))

Sum of Cannabinoids = Δ^9 -THC + THCa + CBD + CBDa + CBG + CBGa + THCV + THCVa + CBC + CBCa + CBDV + CBDVa + Δ^8 -THC + CBL + CBN

Total Cannabinoids = $(\Delta^9$ -THC+0.877*THCa) + (CBD+0.877*CBDa) + (CBG+0.877*CBGa) + (THCV+0.877*THCVa) + (CBC+0.877*CBCa) +

(CBDV+0.877*CBDVa) + Δ^8 -THC + CBL + CBN

SAFETY ANALYSIS - SUMMARY

 Δ^9 -THC per Unit: \bigcirc PASS

Pesticides: PASS

Mycotoxins: PASS

Residual Solvents: PASS

Heavy Metals: PASS

Microbiology (PCR): PASS

Foreign Material: OPASS

For quality assurance purposes. Not a Regulatory Hemp Lab Test Report. These results relate only to the sample included on this report. This report shall not be reproduced, except in full, without written approval of the laboratory.

Sample Certification: California Code of Regulations Title 4 Division 19. Department of Cannabis Control Business and Professions Code. Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

Decision Rule: Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS - Results within limits/specifications, FAIL - Results exceed limits/specifications.

 $\begin{tabular}{ll} \textbf{References:} & limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT), $\mu g/g = ppm, $\mu g/kg = ppb$ \end{tabular}$

LOC verified by: Daniel Hardwick Job Title: Technical Lead Date: 09/26/2025

Approved by: Josh Wurzer
Job Title: Chief Compliance Officer
Date: 09/26/2025

Amendment to Certificate of Analysis 240215Q029-002



Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

DATE ISSUED 09/26/2025





Cannabinoid Analysis

Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP 1157 - Analysis of Cannabinoids by HPLC-DAD

TOTAL THC: 4.665 mg/unit

Total THC (Δ⁹-THC+0.877*THCa)

TOTAL CBD: 206.145 mg/unit

Total CBD (CBD+0.877*CBDa)

TOTAL CANNABINOIDS: 226.710 mg/unit

 $\begin{array}{l} Total \ Cannabinoids \ (Total \ THC) + (Total \ CBD) + \\ (Total \ CBG) + (Total \ THCV) + (Total \ CBC) + \\ (Total \ CBDV) + \Delta^8 - THC + CBL + CBN \end{array}$

TOTAL CBG: ND

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: 10.185 mg/unit

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 3.525 mg/unit

Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 02/17/2024

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.004 / 0.011	±0.5126	13.743	1.3743
СВС	0.003 / 0.010	±0.0219	0.679	0.0679
∆ ⁹ -THC	0.002 / 0.014	±0.0171	0.311	0.0311
CBDV	0.002 / 0.012	±0.0096	0.235	0.0235
CBN	0.001 / 0.007	±0.0030	0.103	0.0103
CBL	0.003 / 0.010	±0.0016	0.043	0.0043
Δ^8 -THC	0.01 / 0.02	N/A	ND	ND
THCa	0.001 / 0.005	N/A	ND	ND
THCV	0.002/0.012	N/A	ND	ND
THCVa	0.002 / 0.019	N/A	ND	ND
CBDa	0.001 / 0.026	N/A	ND	ND
CBDVa	0.001 / 0.018	N/A	ND	ND
CBG	0.002 / 0.006	N/A	ND	ND
CBGa	0.002 / 0.007	N/A	ND	ND
CBCa	0.001 / 0.015	N/A	ND	ND
SUM OF CANNA	BINOIDS		15.114 mg/g	1.5114%

Unit Mass: 15 grams per Unit

Δ^9 -THC per Unit	1100 per-package <mark>limit</mark>	4.665 mg/unit PASS
Total THC per Unit		4.665 mg/unit
CBD per Unit		206.145 mg/unit
Total CBD per Unit		206.145 mg/unit
Sum of Cannabinoids per Unit		226.710 mg/unit
Total Cannabinoids per Unit		226.710 mg/unit



Pesticide Analysis

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS).

*GC-MS utilized where indicated.

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

PESTICIDE TEST RESULTS - 02/18/2024 **⊘** PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Abamectin	0.032 / 0.097	0.3	N/A	ND	PASS
Acephate	0.006/0.018	5	N/A	ND	PASS
Acequinocyl	0.009/0.027	4	N/A	ND	PASS
Acetamiprid	0.016/0.049	5	N/A	ND	PASS
Aldicarb	0.030 / 0.090	≥LOD	N/A	ND	PASS
Allethrin	0.030/0.092		N/A	ND	
Atrazine	0.006/0.019		N/A	ND	
Azadirachtin	0.082 / 0.248		N/A	ND	
Azoxystrobin	0.003 / 0.009	40	N/A	ND	PASS
Benzovindiflupyr	0.003/0.009		N/A	ND	
Bifenazate	0.003 / 0.009	5	N/A	ND	PASS







Pesticide Analysis Continued

PESTICIDE TEST RESULTS - 02/18/2024 continued **⊘** PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (μg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (μg/g)	RESULT
Bifenthrin	0.021 / 0.064	0.5	N/A	ND	PASS
Boscalid	0.003 / 0.009	10	N/A	ND	PASS
Buprofezin [‡]	0.006 / 0.019		N/A	ND	
Captan	0.045 / 0.135	5	N/A	ND	PASS
Carbaryl	0.007 / 0.020	0.5	N/A	ND	PASS
Carbofuran	0.003 / 0.008	≥LOD	N/A	ND	PASS
Chlorantraniliprole	0.006 / 0.018	40	N/A	ND	PASS
Chlordane*	0.010 / 0.032	≥LOD	N/A	ND	PASS
Chlorfenapyr*	0.005 / 0.015	≥LOD	N/A	ND	PASS
Chlormequat chloride	0.022 / 0.066		N/A	ND	
Chlorpyrifos	0.013 / 0.039	≥LOD	N/A	ND	PASS
Clofentezine	0.003 / 0.009	0.5	N/A	ND	PASS
Clothianidin	0.008 / 0.025		N/A	ND	
Coumaphos	0.003 / 0.010	≥ LOD	N/A	ND	PASS
Cyantraniliprole	0.003 / 0.010		N/A	ND	
Cyfluthrin	0.052 / 0.159	1	N/A	ND	PASS
Cypermethrin	0.051 / 0.153	1	N/A	ND	PASS
Cyprodinil [‡]	0.003 / 0.008		N/A	ND	
Daminozide	0.026 / 0.077	≥ LOD	N/A	ND	PASS
Deltamethrin	0.059 / 0.180		N/A	ND	
Diazinon	0.006 / 0.017	0.2	N/A	ND	PASS
Dichlorvos (DDVP)	0.012 / 0.038	≥LOD	N/A	ND	PASS
Dimethoate	0.003 / 0.009	≥LOD	N/A	ND	PASS
Dimethomorph	0.016 / 0.050	20	N/A	ND	PASS
Dinotefuran	0.010/0.030		N/A	ND	
Diuron	0.013 / 0.040		N/A	ND	
Dodemorph	0.012 / 0.035		N/A	ND	
Endosulfan sulfate	0.016 / 0.048		N/A	ND	
Endosulfan-α*	0.004 / 0.014		N/A	ND	
Endosulfan- β *	0.006 / 0.019		N/A	ND	
Ethoprophos	0.003 / 0.009	≥LOD	N/A	ND	PASS
Etofenprox	0.014 / 0.042	≥LOD	N/A	ND	PASS
Etoxazole	0.007 / 0.020	1.5	N/A	ND	PASS
Etridiazole*	0.002 / 0.005		N/A	ND	
Fenhexamid	0.003 / 0.008	10	N/A	ND	PASS
Fenoxycarb	0.003/0.010	≥LOD	N/A	ND	PASS
Fenpyroximate	0.007 / 0.020	2	N/A	ND	PASS
Fensulfothion	0.003 / 0.010	·	N/A	ND	
Fenthion	0.003 / 0.010		N/A	ND	
Fenvalerate [‡]	0.033 / 0.099		N/A	ND	
Fipronil	0.003 / 0.010	≥LOD	N/A	ND	PASS







Pesticide Analysis Continued

PESTICIDE TEST RESULTS - 02/18/2024 continued **⊘** PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (μg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Flonicamid	0.007 / 0.022	2	N/A	ND	PASS
Fludioxonil	0.003 / 0.010	30	N/A	ND	PASS
Fluopyram [‡]	0.003 / 0.009		N/A	ND	
Hexythiazox	0.003/0.010	2	N/A	ND	PASS
Imazalil	0.003 / 0.009	≥LOD	N/A	ND	PASS
Imidacloprid	0.003/0.010	3	N/A	ND	PASS
Iprodione	0.077 / 0.233		N/A	ND	
Kinoprene	0.077 / 0.233		N/A	ND	
Kresoxim-methyl	0.006/0.019	1	N/A	ND	PASS
λ -Cyhalothrin	0.068 / 0.206		N/A	ND	
Malathion	0.003 / 0.009	5	N/A	ND	PASS
Metalaxyl	0.003/0.010	15	N/A	ND	PASS
Methiocarb	0.003 / 0.008	≥ LOD	N/A	ND	PASS
Methomyl	0.008 / 0.025	0.1	N/A	ND	PASS
Methoprene	0.172 / 0.521		N/A	ND	
Mevinphos	0.008 / 0.024	≥LOD	N/A	ND	PASS
MGK-264	0.015 / 0.047		N/A	ND	
Myclobutanil	0.003 / 0.009	9	N/A	ND	PASS
Naled	0.021 / 0.064	0.5	N/A	ND	PASS
Novaluron	0.002 / 0.005		N/A	ND	
Oxamyl	0.017 / 0.051	0.2	N/A	ND	PASS
Paclobutrazol	0.003 / 0.010	≥LOD	N/A	ND	PASS
Parathion-methyl	0.016 / 0.050	≥LOD	N/A	ND	PASS
Pentachloronitro- benzene (Quintozene)*	0.004/0.012	0.2	N/A	ND	PASS
Permethrin	0.0 <mark>56 / 0.168</mark>	20	N/A	ND	PASS
Phenothrin	0.016 / 0.047		N/A	ND	
Phosmet	0.007/0.020	0.2	N/A	ND	PASS
Piperonyl Butoxide	0.010 / 0.029	8	N/A	ND	PASS
Pirimicarb	0.003 / 0.009		N/A	ND	
Prallethrin	0.015 / 0.046	0.4	N/A	ND	PASS
Propiconazole	0.027 / 0.080	20	N/A	ND	PASS
Propoxur	0.003 / 0.008	≥ LOD	N/A	ND	PASS
Pyraclostrobin	0.003/0.010		N/A	ND	
Pyrethrins	0.016 / 0.049	1	N/A	ND	PASS
Pyridaben	0.005 / 0.017	3	N/A	ND	PASS
Pyriproxyfen	0.003/0.009		N/A	ND	
Resmethrin	0.013 / 0.039		N/A	ND	
Spinetoram	0.003 / 0.010	3	N/A	ND	PASS
Spinosad	0.003 / 0.010	3	N/A	ND	PASS
Spirodiclofen	0.031/0.093		N/A	ND	
Spiromesifen	0.016 / 0.050	12	N/A	ND	PASS







Pesticide Analysis Continued

PESTICIDE TEST RESULTS - 02/18/2024 continued **⊘** PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Spirotetramat	0.003/0.010	13	N/A	ND	PASS
Spiroxamine	0.020 / 0.062	≥LOD	N/A	ND	PASS
Tebuconazole	0.003/0.010	2	N/A	ND	PASS
Tebufenozide	0.003 / 0.008		N/A	ND	
Teflubenzuron	0.007/0.022		N/A	ND	
Tetrachlorvinphos	0.003 / 0.008		N/A	ND	
Tetramethrin	0.021 / 0.063		N/A	ND	
Thiabendazole	0.006 / 0.020		N/A	ND	
Thiacloprid	0.003 / 0.009	≥LOD	N/A	ND	PASS
Thiamethoxam	0.003/0.010	4.5	N/A	ND	PASS
Thiophanate-methyl	0.013/0.040		N/A	ND	
Trifloxystrobin	0.003/0.009	30	N/A	ND	PASS



Mycotoxin Analysis

Mycotoxin analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS).

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by I.C.MS

MYCOTOXIN TEST RESULTS - 02/18/2024 O PASS

COMPOUND	LOD/LOQ (µg/kg)	ACTION LIMIT (µg/kg)	MEASUREMENT UNCERTAINTY (μg/kg)	RESULT (µg/kg)	RESULT
Aflatoxin B1	1.6 / 5.0		N/A	ND	
Aflatoxin B2	1.4 / 4.1		N/A	ND	
Aflatoxin G1	1.6 / 4.9		N/A	ND	
Aflatoxin G2	1.6 / 5.0		N/A	ND	
Ochratoxin A	1.6 / 5.0	20	N/A	ND	PASS
Total Aflatoxin		20		ND	PASS



Residual Solvents Analysis

Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS).

Method: QSP 1204 - Analysis of Residual Solvents by GC-MS

RESIDUAL SOLVENTS TEST RESULTS - 02/17/2024 **⊘ PASS**

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Propane	10/20	5000	N/A	ND	PASS
n-Butane	10/50	5000	N/A	ND	PASS
n-Pentane	20/50	5000	N/A	ND	PASS
n-Hexane	2/5	290	N/A	ND	PASS
n-Heptane	20/60	5000	N/A	ND	PASS
Benzene	0.03 / 0.09	1	N/A	ND	PASS
Toluene	7/21	890	±0.8	23	PASS
Total Xylenes	50 / 160	2170	N/A	ND	PASS
Methanol	50/200	3000	N/A	ND	PASS
Ethanol	20/50	5000	N/A	ND	PASS
2-Propanol (Isopropyl Alcohol)	10/40	5000	N/A	ND	PASS
Acetone	20/50	5000	N/A	<loq< th=""><th>PASS</th></loq<>	PASS
Ethyl Ether	20/50	5000	N/A	ND	PASS







RESIDUAL SOLVENTS TEST RESULTS - 02/17/2024 continued PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Ethylene Oxide	0.3 / 0.8	1	N/A	ND	PASS
Ethyl Acetate	20/60	5000	N/A	ND	PASS
Chloroform	0.1/0.2	1	N/A	ND	PASS
Dichloromethane (Methylene Chloride)	0.3/0.9	1	N/A	ND	PASS
Trichloroethylene	0.1/0.3	1	N/A	ND	PASS
1,2-Dichloroethane	0.05 / 0.1	1	N/A	ND	PASS
Acetonitrile	2/7	410	N/A	ND	PASS



Heavy Metals Analysis

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS).

Method: QSP 1160 - Analysis of Heavy Metals by ICP-MS

HEAVY METALS TEST RESULTS - 02/17/2024 PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (μg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Arsenic	0.02 / 0.1	1.5	N/A	ND	PASS
Cadmium	0.02 / 0.05	0.5	N/A	ND	PASS
Lead	0.04 / 0.1	0.5	N/A	ND	PASS
Mercury	0.002 / 0.01	3	N/A	ND	PASS



Microbiology Analysis

PCR

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbiological contaminants.

Method: QSP 1221 - Analysis of Microbiological Contaminants

MICROBIOLOGY TEST RESULTS (PCR) - 02/17/2024 PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Salmonella spp.	Not Detected in 1g	ND	PASS
Shiga toxin-producing Escherichia coli	Not Detected in 1g	ND	PASS



Foreign MaterialAnalysis

Visual analysis includes, but is not limited to, sand, soil, cinders, dirt, mold, hair, insect fragments, and mammalian excreta.

Method: QSP 1226 - Analysis of Foreign Material in Cannabis and Cannabis Products

FOREIGN MATERIAL TEST RESULTS - 02/17/2024 PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Hair Count	> 1 per 3 grams	0.0	PASS
Insect Fragment Count	> 1 per 3 grams	0.0	PASS
Mammalian Excreta Count	> 1 per 3 grams	0.0	PASS
Total Sample Area Covered by an Imbedded Foreign Material	>25%	None	PASS
Total Sample Area Covered by Mold	>25%	None	PASS
Total Sample Area Covered by Sand, Soil, Cinders, or Dirt	>25%	None	PASS

NOTES

Reason for Amendment: Order Detail Information Change