

SAMPLE DETAILS

SAMPLE NAME: Glue 31 #2

Flower, Inhalable

CULTIVATOR / MANUFACTURER

Business Name:
License Number:
Address:

DISTRIBUTOR / TESTED FOR

Business Name: MN River Holdings LLC

License Number:
Address:

SAMPLE DETAIL

Batch Number: 11-04-G312

Sample ID: 250407Q030

Date Collected: 04/07/2025

Date Received: 04/07/2025

Batch Size:
Sample Size: 1.0 grams

Unit Mass:
Serving Size:


Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

CALCULATED USING DRY-WEIGHT

Total THC: 27.17%

Total CBD: 0.093%

Sum of Cannabinoids: 32.3%

Total Cannabinoids: 28.38%

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 = (Δ^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

Moisture: 10.6%

TERPENOID ANALYSIS - SUMMARY

39 TESTED, TOP 3 HIGHLIGHTED

Total Terpenoids: 2.3084%

Limonene 7.489 mg/g

Myrcene 4.167 mg/g

β-Caryophyllene 3.129 mg/g

SAFETY ANALYSIS - SUMMARY

Pesticides: ✔ PASS

Mycotoxins: ✔ PASS

Heavy Metals: ✔ PASS

Microbiology (PCR): ✔ PASS

Microbiology (Plating): DETECTED Foreign Material: ✔ PASS

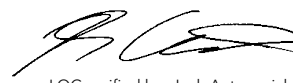
Water Activity: ✔ PASS

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.

References: limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT), µg/g = ppm, µg/kg = ppb, too numerous to count >250 cfu/plate (TNTC), colony-forming unit (cfu)


LQC verified by: Josh Antunovich
Job Title: Laboratory Director
Date: 04/14/2025


Approved by: Josh Wurzer
Job Title: Chief Compliance Officer
Date: 04/14/2025

Amendment to Certificate of Analysis 250407Q030-001



 Cannabinoid Analysis

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

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

TOTAL THC: 27.17%

Total THC (Δ^9 -THC+0.877*THCa)

TOTAL CBD: 0.093%

Total CBD (CBD+0.877*CBDa)

TOTAL CANNABINOIDS: 28.38%

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + Δ^8 -THC + CBL + CBN

TOTAL CBG: 0.82%

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: 0.074%

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: 0.22%

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: ND

Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 04/10/2025

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
THCa	0.04 / 0.24	±9.805	305.46	30.546
CBGa	0.1 / 0.4	±0.46	8.6	0.86
Δ^9 -THC	0.1 / 0.4	±0.12	3.8	0.38
CBCa	0.1 / 0.4	±0.17	2.5	0.25
CBDa	0.06 / 0.22	±0.035	1.06	0.106
THCVa	0.05 / 0.17	±0.020	0.84	0.084
CBG	0.2 / 0.5	±0.05	0.7	0.07
Δ^8 -THC	0.05 / 0.50	N/A	ND	ND
THCV	0.07 / 0.21	N/A	ND	ND
CBD	0.1 / 0.3	N/A	ND	ND
CBDV	0.1 / 0.3	N/A	ND	ND
CBDVa	0.02 / 0.22	N/A	ND	ND
CBL	0.1 / 0.4	N/A	ND	ND
CBN	0.07 / 0.20	N/A	ND	ND
CBC	0.1 / 0.2	N/A	ND	ND
SUM OF CANNABINOIDS			323.0 mg/g	32.3%

MOISTURE TEST RESULT

10.6%

Tested 04/12/2025

Method: QSP 1224 - Loss on Drying (Moisture)

 Terpenoid Analysis

Terpene analysis utilizing gas chromatography-flame ionization detection (GC-FID).

Method: QSP 1192 - Analysis of Terpenoids by GC-FID

TERPENOID TEST RESULTS - 04/10/2025

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
Limonene	0.005 / 0.016	±0.2441	7.489	0.7489
Myrcene	0.007 / 0.025	±0.1475	4.167	0.4167
β -Caryophyllene	0.004 / 0.013	±0.1683	3.129	0.3129
Linalool	0.009 / 0.036	±0.0950	2.418	0.2418
α -Humulene	0.009 / 0.180	±0.0541	1.006	0.1006
β -Pinene	0.004 / 0.015	±0.0314	0.971	0.0971
Terpineol	0.008 / 0.025	±0.0446	0.729	0.0729
Fenchol	0.009 / 0.036	±0.0254	0.689	0.0689
trans- β -Farnesene	0.008 / 0.028	±0.0296	0.519	0.0519
Nerolidol	0.006 / 0.021	±0.0403	0.509	0.0509

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Terpenoid Analysis *Continued*
TERPENOID TEST RESULTS - 04/10/2025 *continued*

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
1 Limonene				
A monoterpene with a fragrance that can be described as orangey, citrusy, sweet and tart. It is most commonly found in nature as D-Limonene and is a primary contributor to the distinct scent of orange peels, from which it is commonly derived. Found in numerous pines, red maple, silver maple, aspens, cottonwoods, hemlocks, sumac, cedar, junipers...etc.				
α -Pinene	0.005 / 0.036	± 0.0176	0.492	0.0492
α -Bisabolol	0.008 / 0.026	± 0.0154	0.358	0.0358
Borneol	0.004 / 0.014	± 0.0081	0.173	0.0173
Camphene	0.004 / 0.014	± 0.0052	0.161	0.0161
Terpinolene	0.008 / 0.036	± 0.0014	0.095	0.0095
Geraniol	0.002 / 0.036	± 0.0029	0.055	0.0055
Caryophyllene Oxide	0.011 / 0.038	± 0.0029	0.048	0.0048
β -Ocimene	0.005 / 0.025	± 0.0010	0.025	0.0025
Pulegone	0.003 / 0.010	± 0.0013	0.020	0.0020
γ -Terpinene	0.005 / 0.018	± 0.0004	0.018	0.0018
Isoborneol	0.003 / 0.011	± 0.0006	0.013	0.0013
Citronellol	0.003 / 0.036	N/A	<LOQ	<LOQ
Fenchone	0.008 / 0.036	N/A	<LOQ	<LOQ
Nerol	0.003 / 0.036	N/A	<LOQ	<LOQ
Sabinene Hydrate	0.007 / 0.036	N/A	<LOQ	<LOQ
Valencene	0.010 / 0.180	N/A	<LOQ	<LOQ
2 Myrcene				
A monoterpene with a fragrance that can be described as peppery, spicy, herbal, floral and woody. Although it has a pleasant odor, it is typically used by the perfume industry as precursor for developing other fragrances. Found in hops, houttuynia, bay, thyme, lemon grass, mango, verbena, cardamom, citrus...etc.				
α -Cedrene	0.005 / 0.017	N/A	ND	ND
α -Phellandrene	0.006 / 0.036	N/A	ND	ND
α -Terpinene	0.006 / 0.019	N/A	ND	ND
Camphor	0.005 / 0.036	N/A	ND	ND
Cedrol	0.009 / 0.032	N/A	ND	ND
Δ^3 -Carene	0.005 / 0.018	N/A	ND	ND
Eucalyptol	0.005 / 0.018	N/A	ND	ND
Geranyl Acetate	0.004 / 0.036	N/A	ND	ND
Guaiol	0.011 / 0.035	N/A	ND	ND
Isopulegol	0.004 / 0.036	N/A	ND	ND
Menthol	0.008 / 0.025	N/A	ND	ND
p-Cymene	0.005 / 0.015	N/A	ND	ND
Sabinene	0.004 / 0.014	N/A	ND	ND
3 β-Caryophyllene				
A sesquiterpene with a fragrance that can be described as spicy, woody, dry, dusty and mildly sweet. It was one of the first organic compounds to fully synthesized in a laboratory and plays a role in the endocannabinoid system as it is a functional CB ₂ receptor agonist. Found in black pepper, clove, hops, rosemary, black-jack, perilla, spicebush, Indian pennywort, celery, frankincense, vitex, parsley, marigold, tamarind...etc.				
TOTAL TERPENOIDS			23.084 mg/g	2.3084%


Pesticide Analysis
PESTICIDE TEST RESULTS - 04/13/2025 ✓ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Abamectin	0.03 / 0.10	0.1	N/A	ND	PASS
Azoxystrobin	0.02 / 0.07	0.1	N/A	ND	PASS
Bifenazate	0.01 / 0.04	0.1	N/A	ND	PASS
Bifenthrin	0.02 / 0.05	3	N/A	ND	PASS
Boscalid	0.03 / 0.09	0.1	N/A	ND	PASS
Chlorpyrifos	0.02 / 0.06	$\geq LOD$	N/A	ND	PASS

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

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Pesticide Analysis *Continued*

PESTICIDE TEST RESULTS - 04/13/2025 *continued* ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Cypermethrin	0.11 / 0.32	1	N/A	ND	PASS
Etoxazole	0.02 / 0.06	0.1	N/A	ND	PASS
Hexythiazox	0.02 / 0.07	0.1	N/A	ND	PASS
Imidacloprid	0.04 / 0.11	5	N/A	ND	PASS
Malathion	0.03 / 0.09	0.5	N/A	ND	PASS
Myclobutanil	0.03 / 0.09	0.1	N/A	ND	PASS
Permethrin	0.04 / 0.12	0.5	N/A	ND	PASS
Piperonyl Butoxide	0.02 / 0.07	3	N/A	ND	PASS
Propiconazole	0.02 / 0.07	0.1	N/A	ND	PASS
Spiromesifen	0.02 / 0.05	0.1	N/A	ND	PASS
Tebuconazole	0.02 / 0.07	0.1	N/A	ND	PASS
Trifloxystrobin	0.03 / 0.08	0.1	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 LC-MS

MYCOTOXIN TEST RESULTS - 04/13/2025 ✔ PASS

COMPOUND	LOD/LOQ (µg/kg)	ACTION LIMIT (µg/kg)	MEASUREMENT UNCERTAINTY (µg/kg)	RESULT (µg/kg)	RESULT
Aflatoxin B1	2.0 / 6.0		N/A	ND	
Aflatoxin B2	1.8 / 5.6		N/A	ND	
Aflatoxin G1	1.0 / 3.1		N/A	ND	
Aflatoxin G2	1.2 / 3.5		N/A	ND	
Ochratoxin A	6.3 / 19.2	20	N/A	ND	PASS
Total Aflatoxin		20		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 - 04/10/2025 ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Arsenic	0.02 / 0.1	0.2	±0.00	0.1	PASS
Cadmium	0.02 / 0.05	0.2	N/A	<LOQ	PASS
Lead	0.04 / 0.1	0.5	N/A	ND	PASS
Mercury	0.002 / 0.01	0.1	N/A	ND	PASS



Microbiology Analysis

PCR AND PLATING

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

Method: QSP 1221 - Analysis of Microbiological Contaminants

MICROBIOLOGY TEST RESULTS (PCR) - 04/14/2025 ✓ PASS

COMPOUND	ACTION LIMIT (cfu/g)	RESULT (cfu/g)	RESULT
Bile-Tolerant Gram-Negative Bacteria		328.0	
<i>Salmonella</i> spp.	Not Detected in 1g	ND	PASS
Shiga toxin-producing <i>Escherichia coli</i>	Not Detected in 1g	ND	PASS
<i>Staphylococcus aureus</i>		ND	

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbiological contaminants.

Method: QSP 6794 - Plating with 3M™ Petrifilm™

MICROBIOLOGY TEST RESULTS (PLATING) - 04/14/2025 DETECTED

COMPOUND	RESULT (cfu/g)
Total Aerobic Bacteria	60000.0
Total Yeast and Mold	ND



Foreign Material Analysis

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 - 04/08/2025 ✓ PASS

COMPOUND	ACTION LIMIT	RESULT (per 3 Grams)	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



Water Activity Analysis

Method: QSP 1227 - Analysis of Water Activity in Cannabis and Cannabis Products

WATER ACTIVITY TEST RESULTS - 04/12/2025 ✓ PASS

COMPOUND	LOD/LOQ (Aw)	ACTION LIMIT (Aw)	MEASUREMENT UNCERTAINTY (Aw)	RESULT (Aw)	RESULT
Water Activity	0.030 / 0.15	0.65	±0.003	0.42	PASS

NOTES

Reason for Amendment: Result Change