Hemp Quality Assurance Testing

CERTIFICATE OF ANALYSIS

DATE ISSUED 05/30/2024

SAMPLE NAME: Relief - Red - Muscle Gel

Infused, Hemp

CULTIVATOR / MANUFACTURER

Business Name:
License Number:
Address:

DISTRIBUTOR / TESTED FOR

Business Name: North Star Hemp
License Number:
Address:

SAMPLE DETAIL

Batch Number: NSH00504024
Sample ID: 240528R032

Date Collected: 05/28/2024
Date Received: 05/28/2024
Batch Size:
Sample Size: 1.0 units
Unit Mass: 30 grams per Unit
Serving Size:

Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: 27.900 mg/unit

Total CBD: 886.590 mg/unit

Sum of Cannabinoids: 962.760 mg/unit

Total Cannabinoids: 962.760 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 = (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

LQC verified by: Rinal Ahir
Date: 05/30/2024

Approved by: Josh Wurzer
Job Title: Chief Compliance Officer
Date: 05/30/2024

References: limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT)

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: 27.900 mg/unit
Total THC (Δ^9-THC+0.877*THCa)

TOTAL CBD: 886.590 mg/unit
Total CBD (CBD+0.877*CBDa)

TOTAL CANNABINOIDS: 962.760 mg/unit
Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + Δ^8-THC + CBL + CBN

TOTAL CBG: 15.810 mg/unit
Total CBG (CBG+0.877*CBGa)

TOTAL THCV: 0.450 mg/unit
Total THCV (THCV+0.877*THCVa)

TOTAL CBC: 28.860 mg/unit
Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 2.340 mg/unit
Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 05/30/2024

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	*0.004 / 0.011*	*±1.1023*	29.553	2.9553
CBC	*0.003 / 0.010*	*±0.0310*	0.962	0.0962
Δ^9-THC	*0.002 / 0.014*	*±0.0511*	0.930	0.0930
CBG	*0.002 / 0.006*	*±0.0256*	0.527	0.0527
CBDV	*0.002 / 0.012*	*±0.0032*	0.078	0.0078
CBL	*0.003 / 0.010*	*±0.0010*	0.027	0.0027
THCV	*0.002 / 0.012*	*±0.0007*	0.015	0.0015
Δ^8-THC	*0.01 / 0.02*	*N/A*	ND	ND
THCa	*0.001 / 0.005*	*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
CBGa	*0.002 / 0.007*	*N/A*	ND	ND
CBN	*0.001 / 0.007*	*N/A*	ND	ND
CBCa	*0.001 / 0.015*	*N/A*	ND	ND
SUM OF CANNABINOIDS			32.092 mg/g	3.2092%

Unit Mass: 30 grams per Unit

Δ^9-THC per Unit	27.900 mg/unit
Total THC per Unit	27.900 mg/unit
CBD per Unit	886.590 mg/unit
Total CBD per Unit	886.590 mg/unit
Sum of Cannabinoids per Unit	962.760 mg/unit
Total Cannabinoids per Unit	962.760 mg/unit