

Utah Department of Agriculture and Food **Division of Laboratory Services** 4451 South 2700 West Taylorsville, Utah 84129 (801) 816-3840

CERTIFICATE OF ANALYSIS

Sample Information

| UDAF Lab # | HP24361-1 | Issue Date: | 12/31/2024 |
|-------------------|--------------------------|---------------|--------------------------------|
| Client: | Boojum Group | Client Email: | bk@boojumgroup.com |
| Producer: | Producer: Boojum Group | | Infused Non-edible Products |
| Description: | Touch CBD body oil | | |
| Batch/Lot Number: | Batch/Lot Number: 241212 | | 12/26/2024 |
| Date Collected: | | Collected By: | Self-Submitted |



Notes:

Testing Summary

| Analysis: | Testing Date: | Status: | Notes: |
|--------------|---------------|---------|--------|
| Cannabinoids | 12/30/2024 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Date: 12/31/2024 Approved By: Brandon Forsyth, Ph.D State Chemist

The results reported herein pertain only to the indicated sample and may not be used as an endorsement of a product. The results are given under applicable provisions of the Utah Code and represent a true statement of the outcomes of the analyses conducted on the sample received by the laboratory. This report may not be reproduced, except in its entirety. © 2024 All Rights Reserved.



CERTIFICATE OF ANALYSIS

| Cannabinoid Analysis | | | Status: | | |
|----------------------|------------|--------------|--------------------|--|--|
| Sample ID: | HP24361-1 | Description: | Touch CBD body oil | | |
| Testing Date: | 12/30/2024 | Reviewed By: | Cameron Cheyne | | |

Method: ACL.AM.003 Analysis performed using High-Performance Liquid Chromatography (HPLC-DAD)

| Abbreviation | CAS Number | % (w/w) | mg/g |
|------------------|--|---|---|
| Δ9-ΤΗΟ | 1972-08-03 | 0.06% | 0.6 |
| Δ8-THC | 5957-75-5 | ND | ND |
| THCA | 23978-85-0 | ND | ND |
| THCV | 31262-37-0 | ND | ND |
| CBD | 13956-29-1 | 1.95% | 19.5 |
| CBDA | 1244-58-2 | ND | ND |
| CBDV | 24274-48-4 | 0.06% | 0.6 |
| CBN | 521-35-7 | ND | ND |
| CBG | 25654-31-3 | 0.05% | 0.5 |
| CBC | 20675-51-8 | 0.07% | 0.7 |
| CBGA | 25555-57-1 | ND | ND |
| CBCA | 20408-52-0 | ND | ND |
| CBTC | 31508-71-1 | ND | ND |
| Δ3-THC | 95720-01-07, 95720- 02-8 | ND | ND |
| (6aR,9R)-∆10-THC | 95543-62-7 | ND | ND |
| (6aR,9S)-∆10-THC | 95588-87-7 | ND | ND |
| | | 2.19% | 21.90 |
| | | 0.06% | 0.6 |
| | | 1.95% | 19.50 |
| | | 0.06% | 0.6 |
| | Δ9-THC Δ8-THC THCA THCV CBD CBDA CBDV CBN CBG CBC CBCA CBCA CBTC Δ3-THC (6aR,9R)-Δ10-THC | Δ9-THC 1972-08-03 Δ8-THC 5957-75-5 THCA 23978-85-0 THCV 31262-37-0 CBD 13956-29-1 CBDA 1244-58-2 CBDV 24274-48-4 CBN 521-35-7 CBG 25654-31-3 CBC 20675-51-8 CBCA 2555-57-1 CBCA 20408-52-0 CBTC 31508-71-1 Δ3-THC 95720-01-07, 95720- 02-8 (6aR,9R)-Δ10-THC 95543-62-7 | Δ9-THC 1972-08-03 0.06% Δ8-THC 5957-75-5 ND THCA 23978-85-0 ND THCV 31262-37-0 ND CBD 13956-29-1 1.95% CBDA 1244-58-2 ND CBDV 24274-48-4 0.06% CBN 521-35-7 ND CBG 25654-31-3 0.05% CBC 20675-51-8 0.07% CBGA 25555-57-1 ND CBCA 20408-52-0 ND CBCA 20408-52-0 ND CBCA 20408-52-0 ND CBCA 20408-52-0 ND CBTC 31508-71-1 ND CBTC 31508-71-1 ND Δ3-THC 95720-01-07, 95720- 02-8 ND (6aR,9R)-Δ10-THC 95588-87-7 ND (6aR,9S)-Δ10-THC 95588-87-7 ND (6aR,9S)-Δ10-THC 95588-87-7 ND (6aR,9S)-Δ10-THC 95588-87-7 ND |

Mass Per Piece:

Status:

Notes:

Total Cannabinoids is calculated as the direct sum of each of the cannabinoid values. Total THC is calculated as Δ9-THC + (THCA x 0.877) | Total CBD is calculated as CBD + (CBDA x 0.877). Total THC Analogs is calculated as Δ9-THC + (THCA x 0.877) + Δ8-THC + CBTC. ND = Not Detected, NQ = Not Quantifiable, NT = Not Tested, <LOQ = Below the limit of quantification

The results reported herein pertain only to the indicated sample and may not be used as an endorsement of a product. The results are given under applicable provisions of the Utah Code and represent a true statement of the outcomes of the analyses conducted on the sample received by the laboratory. This report may not be reproduced, except in its entirety. © 2024 All Rights Reserved.



Comprehensive Analysis Report

Sample Overview

Client: Boojum Group, LLC 2206 W 3000 S Suite F Heber, UT 84032

Sample Name: Touch Body Oil Sample Matrix: Topical Applicant Sample Lot: 241212 Date Received: 12/13/2024 APRC #: BG241216A

| Assay | Disposition | Report Date |
|---|-------------|----------------|
| Hemp or R&D Cannabinoid Testing (Potency) | Tested | 12/20/2024 |
| Heavy Metals - Utah State Cannabis Panel | Tested | 12/20/2024 |
| Microbial: Detection of Specific Pathogenic Organisms | Tested | 12/20/2024 |
| Pesticide Screen (APRC Panel) | Tested | 12/20/2024 |
| Hemp or R&D Residual Solvents | Tested | 12/20/2024 |
| Terpene Quantitation | Tested | 12/20/2024 |
| Mycotoxin Quantitation | Tested | 12/20/2024 |





Potency

| Cannabinoid | RT | Total % | Total mg/g |
|---|------|---------|------------|
| Cannabidivarinic Acid (CBDVA) | ND | ND | ND |
| Cannabidivarin (CBDV) | 2.35 | 0.07 | 0.71 |
| Cannabidiolic Acid (CBDA) | ND | ND | ND |
| Cannabigerolic Acid (CBGA) | ND | ND | ND |
| Cannabinol (CBN) | 5.31 | 0.01 | 0.08 |
| Cannabidiol (CBD) | 3.58 | 2.08 | 20.80 |
| Cannabigerol (CBG) | 3.34 | 0.06 | 0.55 |
| Tetrahydrocannabivarin (THCV) | ND | ND | ND |
| Tetrahydrocannabivarin Acid (THCVA) | ND | ND | ND |
| Delta-9-Tetrahydrocannabinol (Δ9-THC) | 6.73 | 0.07 | 0.69 |
| Delta-8-Tetrahydrocannabinol (Δ8-THC) | ND | ND | ND |
| Tetrahydrocannabinolic acid (THCA-A) | ND | ND | ND |
| Cannabichromene (CBC) | 8.49 | 0.07 | 0.74 |
| Cannabichromene Acid (CBCA) | ND | ND | ND |
| $\Delta 10$ and $\Delta 6a, 10a$ -Tetrahydrocannabinol, mixed isomers | ND | ND | ND |
| (6aR,9R)-Δ10-Tetrahydrocannabidiol | NT | NT | NT |
| (6aR,9S)-Δ10-Tetrahydrocannabidiol | NT | NT | NT |
| 9(R+S)-Δ6a,10a-Tetrahydrocannabidiol | NT | NT | NT |
| Cannabicitran (CBTC) | ND | ND | ND |

Performed by: Samikshya Neupane

Reviewed by: Jordan Morley

| | % | mg/g |
|------------------------|------|-------|
| Total Cannabinoids | 2.36 | 23.57 |
| Total THC ^t | 0.07 | 0.69 |
| Total CBD ^s | 2.08 | 20.80 |

 t Total Thc is calculated by $\Delta9\text{-THC}$ +(THCA-A*0.877)

^sTotal CBD is calculated by CBD + (CBDA*0.877)

LOD > 0.005% by mass, LOQ > 0.01% by mass

Heavy Metals



| Method: CTLA | Sample I | Name: Touch Body Oil | Body Oil APRC Lot Number: BG241 | | |
|--------------|--------------|----------------------|---------------------------------|-----------|--|
| Analyte | Result (ppm) | LOD (ppm) | Threshold (ppm) | Pass/Fail | |
| Arsenic | 0.003 | 0.001 | 2.00 | Pass | |
| Cadmium | <0.001 | 0.001 | 0.82 | Pass | |
| Lead | 0.002 | 0.001 | 1.20 | Pass | |
| Mercury | <0.001 | 0.001 | 0.40 | Pass | |

Heavy metal analysis is completed in partnership with Contract Testing Laboratories of America, Orem UT.

Performed by: Jordan Morley

Reviewed by:

Copyright © 2020 by Aromatic Plant Research Center (APRC). All rights reserved. The information in this test report may not be reproduced except in full. These results only apply to the samples included in this report.



Microbial Impurities

Method: SOP 1.2035.01 Sample Name: Touch Body Oil
Total Counts

APRC Lot Number: BG241216A

| Total Counts | | | | | |
|------------------------|-----------------|----------------|--------------|--|--|
| Microbial Group: | Result (CFU/g): | Specification: | Disposition: | | |
| Total Aerobic Bacteria | <10 | NT | Fail | | |
| Total Yeast and Mold | <10 | NT | Fail | | |

| Specific Organism Identification | | | | | |
|----------------------------------|--------------|----------------|-------------|--|--|
| Microbial Organism: | Result: | Specification: | Disposition | | |
| Aspergillus flavus | NT | NT | Not Tested | | |
| Aspergillus fumigatus | NT | NT | Not Tested | | |
| Aspergillus niger | NT | NT | Not Tested | | |
| Aspergillus terreus | NT | NT | Not Tested | | |
| E. coli | NT | NT | Not Tested | | |
| STEC | NT | NT | Not Tested | | |
| Salmonella - Specific Gene | NT | NT | Not Tested | | |
| Staphylococcus aureus | Not Detected | Not Detected | Pass | | |
| Pseudomonas aeruginosa | Not Detected | Not Detected | Pass | | |

Performed by: Jordan Morley

Notes: Foreign Matter: Not Detected.

Reviewed by: Nicholas Saichek

Pesticides



Method:

Sample Name: Touch Body Oil

| APRC Lot Number: E | BG241216A |
|--------------------|-----------|
|--------------------|-----------|

| Pesticide: | Finding | Action Limit (µg/g) | Pass/Fail | Pesticide: | Finding | Action Limit (µg/g) | Pass/Fail |
|--------------------|---------|---------------------|-----------|--------------------|---------|---------------------|-----------|
| Abamectin | ND | 0.5 | Pass | Hexythiazox | ND | 1.0 | Pass |
| Acephate | ND | 0.4 | Pass | Imazalil | ND | 0.2 | Pass |
| Acequinocyl | ND | 2.0 | Pass | Imidacloprid | ND | 0.4 | Pass |
| Acetamiprid | ND | 0.2 | Pass | Kresoxim-methyl | ND | 0.4 | Pass |
| Aldicarb | ND | 0.4 | Pass | Malathion | ND | 0.2 | Pass |
| Azoxystrobin | ND | 0.2 | Pass | Metalaxyl | ND | 0.2 | Pass |
| Bifenazate | ND | 0.2 | Pass | Methiocarb | ND | 0.2 | Pass |
| Bifenthrin | ND | 0.2 | Pass | Methomyl | ND | 0.4 | Pass |
| Boscalid | ND | 0.4 | Pass | Methyl parathion | ND | 0.2 | Pass |
| Carbaryl | ND | 0.2 | Pass | MGK-264 | ND | 0.2 | Pass |
| Carbofuran | ND | 0.2 | Pass | Myclobutanil | ND | 0.2 | Pass |
| hlorantraniliprole | ND | 0.2 | Pass | Naled | ND | 0.5 | Pass |
| Chlorfenapyr | ND | 1.0 | Pass | Oxamyl | ND | 1.0 | Pass |
| Chlorpyrifos | ND | 0.2 | Pass | Paclobutrazol | ND | 0.4 | Pass |
| Clofentezine | ND | 0.2 | Pass | Permethrins | ND | 0.2 | Pass |
| Cyfluthrin | ND | 1.0 | Pass | Phosmet | ND | 0.2 | Pass |
| Cypermethrin | ND | 1.0 | Pass | Piperonyl butoxide | ND | 2.0 | Pass |
| Daminozide | ND | 1.0 | Pass | Prallethrin | ND | 0.2 | Pass |
| Dichlorvos | ND | 0.1 | Pass | Propiconazole | ND | 0.4 | Pass |
| Diazinon | ND | 0.2 | Pass | Propoxur | ND | 0.2 | Pass |
| Dimethoate | ND | 0.2 | Pass | Pyrethrin | ND | 1.0 | Pass |
| Ethoprophos | ND | 0.2 | Pass | Pyridaben | ND | 0.2 | Pass |
| Etofenprox | ND | 0.4 | Pass | Spinosad | ND | 0.2 | Pass |
| Etoxazole | ND | 0.2 | Pass | Spiromesifen | ND | 0.2 | Pass |
| Fenoxycarb | ND | 0.2 | Pass | Spirotetramat | ND | 0.2 | Pass |
| Fenpyroximate | ND | 0.4 | Pass | Spiroxamine | ND | 0.4 | Pass |
| Fipronil | ND | 0.4 | Pass | Tebuconazole | ND | 0.4 | Pass |
| Flonicamid | ND | 1.0 | Pass | Thiacloprid | ND | 0.2 | Pass |
| Fludioxonil | ND | 0.4 | Pass | Thiamethoxam | ND | 0.2 | Pass |
| | | | | Trifloxystrobin | ND | 0.2 | Pass |

Performed by:

Reviewed by: <u>Nicholas Saichek</u>

Pesticide testing performed in a non-ISO 17025:2017 accredited facility. Pass/Fail determinations based on Utah Administrative Rule R68-29.

<u>Anil</u> Rokaya

Copyright @ 2020 by Aromatic Plant Research Center (APRC). All rights reserved. The information in this test report may not be reproduced except in full. These results only apply to the samples included in this report.

Residual Solvents

APRC

Method: SOP 1-2027.03

Sample Name: Touch Body Oil

APRC Lot Number: BG241216A

| Residual Solvent | Finding (µg/g) | Action Level (µg/g) | Pass/Fai |
|-------------------------|----------------|---------------------|----------|
| Dimethyl sulfoxide | ND | 5000 | Pass |
| N,N-dimethylacetamide | ND | 1090 | Pass |
| 1,2 Dimethoxyethane | ND | 100 | Pass |
| 1,4 Dioxane | ND | 380 | Pass |
| 1-Butanol | ND | 5000 | Pass |
| 1-Pentanol | ND | 5000 | Pass |
| 1-Propanol | ND | 5000 | Pass |
| 2-Butanone | ND | 5000 | Pass |
| 2-Butanol | ND | 5000 | Pass |
| 2-Ethoxyethanol | ND | 160 | Pass |
| 2-Methylbutane | ND | 5000 | Pass |
| 2-Propanol | ND | 5000 | Pass |
| Acetone | 4.060 | 5000 | Pass |
| Acetonitrile | ND | 410 | Pass |
| Benzene | ND | 2 | Pass |
| Butane | ND | 5000 | Pass |
| Cumene | ND | 70 | Pass |
| Cyclohexane | ND | 3880 | Pass |
| Dichloromethane | ND | 600 | Pass |
| 2,2-Dimethylbutane | ND | 290 | Pass |
| 2,3-Dimethylbutane | ND | 290 | Pass |
| m,p-Xylene | ND | See Total Xylenes | Pass |
| o-Xylene | ND | See Total Xylenes | Pass |
| Ethanol | 2.644 | 5000 | Pass |
| Ethyl Acetate | ND | 5000 | Pass |
| Ethyl Benzene | ND | See Total Xylenes | Pass |
| Ethyl Ether | ND | 5000 | Pass |
| Ethylene Glycol | ND | 620 | Pass |
| Ethylene Oxide | ND | 50 | Pass |

| Residual Solvent | Finding (µg/g) | Action Level (µg/g) | Pass/Fail |
|-----------------------|----------------|---------------------|-----------|
| Heptane | ND | 5000 | Pass |
| Hexane | ND | 290 | Pass |
| Isopropyl Acetate | ND | 5000 | Pass |
| Methanol | ND | 3000 | Pass |
| Methylpropane | ND | 5000 | Pass |
| 2-Methylpentane | ND | 290 | Pass |
| 3-Methylpentane | ND | 290 | Pass |
| N,N-Dimethylformamide | ND | 880 | Pass |
| Pentane | ND | 5000 | Pass |
| Propane | ND | 5000 | Pass |
| Pyridine | ND | 100 | Pass |
| Sulfolane | ND | 160 | Pass |
| Tetrahydrofuran | ND | 720 | Pass |
| Toluene | ND | 890 | Pass |
| Total Xylenes | ND | 2170 | Pass |

† Per Utah state code 4-41a-701(3) Section R68-29-6
 ‡ Total Xylenes is a combination of the following: o-Xylene, m-Xylene, p-Xylene, and Ethylbenzene

Overall Disposition: <u>Pass</u> Performed By: <u>Anil Rokaya</u> Reviewed By:



Terpenes

Method: SOP 1-2029.03

Sample Name: Touch Body Oil

APRC Lot Number: BG241216A

Total (mg/g) 0.612 0.148 0.054 ND ND ND ND ND ND 0.169 ND 0.063 ND ND ND ND ND ND ND 0.015 ND

| Analyte | Total % (w/w) | Total (mg/g) | Analyte | Total % |
|------------------------|---------------|--------------|------------------------|---------|
| α-Pinene | 0.003 | 0.028 | Andryte | (w/w) |
| Camphene | 0.002 | 0.020 | Menthol | 0.061 |
| Sabinene | 0.001 | 0.012 | Terpinen-4-ol | 0.015 |
| β-pinene | 0.002 | 0.023 | α-Terpineol | 0.005 |
| Myrcene | 0.002 | 0.022 | Nerol | ND |
| α -Phellandrene | ND | ND | Citronellol | ND |
| 3-Carene | ND | ND | Geraniol | ND |
| α-Terpinene | ND | ND | Thymol | ND |
| m-Cymene | ND | ND | Carvacrol | ND |
| p-Cymene | 0.002 | 0.018 | (-)-α-Cedrene | ND |
| Limonene | 0.005 | 0.053 | β-Caryophyllene | 0.017 |
| cis-β-Ocimene | 0.011 | 0.115 | β-Cedrene | ND |
| Eucalyptol | 0.021 | 0.205 | trans-β-Farnesene | 0.006 |
| ortho-Cymene | ND | ND | Humulene | ND |
| trans-β-Ocimene | 0.006 | 0.061 | Valencene | ND |
| γ-Terpinene | ND | ND | cis-Nerolidol | ND |
| Sabinine Hydrate | 0.002 | 0.017 | trans-Nerolidol | ND |
| Terpinolene | ND | ND | Squalene | ND |
| Linalool | 0.119 | 1.191 | Guaiol | ND |
| Fenchyl Alcohol | ND | ND | Cedrol | ND |
| Isopulegol | ND | ND | α-Bisabolol | 0.001 |
| Isoborneol | ND | ND | Farneseol | ND |
| Borneol | 0.002 | 0.024 | Phytane (2,6,10,14- | ND |
| | | | Tetramethylhexadecane) | |

Performed by:

<u>Anil Rokaya</u>

Reviewed by: William Deutschman

Total

ND

2.849

0.285



Mycotoxins

| hod: Mycotoxin | Sample Name: Touch Body Oil | | APRC Lot Number: BG24121 | |
|-------------------|-----------------------------|--------------|--------------------------|--|
| Mycotoxin | Finding (µg/kg) | Limit(µg/kg) | Pass/Fail | |
| Aflatoxin B1: | ND | - Br | | |
| Aflatoxin B2: | ND | | | |
| Aflatoxin G1: | ND | | | |
| Aflatoxin G2: | ND | | | |
| Total Aflatoxins: | 0 | 20 | Pass | |
| Ochratoxin A: | ND | 20 | Pass | |

Performed by: Anil Rokaya

Reviewed by: Nicholas Saichek

-1

Approved By: Nicholas Saichek, PhD Senior Scientist Mass Spectrometry 12/20/2024

Copyright @ 2020 by Aromatic Plant Research Center (APRC). All rights reserved. The information in this test report may not be reproduced except in full. These results only apply to the samples included in this report.