



Smithers AMS LLC  
790 Main St  
Wareham, MA 02571  
License #: IL281355  
Phone: 508-295-2550



Customer: Trade Roots

Address:

6 Thatcher Lane  
Wareham MA 02571

Phone: 774-326-0077

License #: MP281436 & MC281262



Sample ID: 12576  
Sample Name: Strawberry Bonnet- Bulk  
Sample Strain: Strawberry Bonnet  
Sample Type: Flower  
Received Date: 05/07/2024  
Report Date: 05/12/2024  
METRC ID: 1A40A0300006BD1000004761  
METRC Source ID:  
1A40A0300006BD1000004752  
Client Batch ID: SBB-050124-B1  
Client Sample Size: 6 g

## Certificate of Analysis



### Results Summary

#### Cannabinoids

05/08/2024

TESTED

#### Terpenes Extended

05/09/2024

TESTED

#### Heavy Metals

05/08/2024

✓ PASS

#### Microbial Impurities

05/11/2024

✓ PASS

#### Mycotoxins

05/12/2024

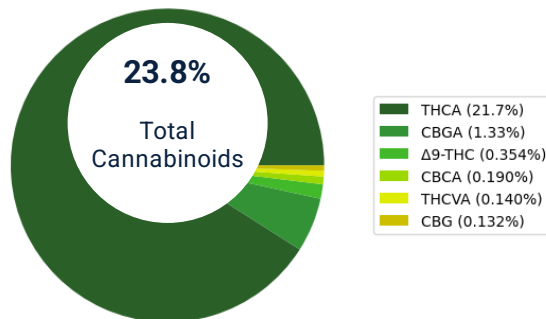
✓ PASS

#### Pesticides

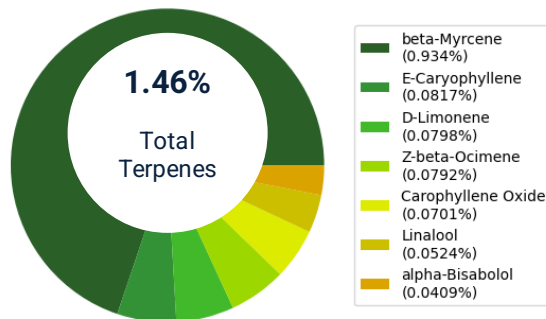
05/12/2024

✓ PASS

### Cannabinoid Distribution (%)



### Terpene Distribution (%)



Disclaimer: The results presented within this report pertain only to the sample(s) indicated, as received by Smithers AMS LLC. Smithers AMS LLC is responsible for the information provided in this report, unless indicated that the customer provided the information. This report shall not be reproduced, except in full, without the written approval of Smithers AMS LLC. Action limits used to dictate pass/fail criteria are set by the Massachusetts Cannabis Control Commission.



## Cannabinoids

**Date Started:** 05/07/2024  
**Instrument:** UPLC-PDA

**Date Completed:** 05/08/2024  
**Method:** TP-09.001.05 & TP-09.012.05

**Analyst:** Yüemin Wang Kovaleff  
**Deviation:** N/A

Cannabinoid	Result (%)	Result (mg/g)	LOD (%)	LOQ (%)
THCA	21.7	217	0.0945	0.590
CBGA	1.33	13.3	0.00231	0.0295
Δ9-THC	0.354	3.54	0.0109	0.0590
CBCA	0.190	1.90	0.00761	0.0236
THCVA	0.140	1.40	0.00251	0.0236
CBG	0.132	1.32	0.00256	0.0295
CBDVA	ND	ND	0.00397	0.0236
CBDV	ND	ND	0.0113	0.0236
CBDA	ND	ND	0.00372	0.0590
CBD	ND	ND	0.00457	0.0590
Δ9-THCV	ND	ND	0.00318	0.0236
Δ8-THCV	ND	ND	0.00576	0.0236
CBN	ND	ND	0.00404	0.0295
CBNA	ND	ND	0.00312	0.0236
Exo-THC	ND	ND	0.00472	0.0236
Δ8-THC	ND	ND	0.0103	0.0295
CBL	ND	ND	0.00699	0.0236
CBC	ND	ND	0.00280	0.0236
<b>Total THC</b>	<b>19.4</b>	<b>194</b>		
<b>Total CBD</b>	<b>ND</b>	<b>ND</b>		
<b>Total Cannabinoids</b>	<b>23.8</b>	<b>238</b>		

**Total THC** = Δ9-THC + (THCA-A x 0.877)

**Total CBD** = CBD + (CBDA x 0.877)

**Total Cannabinoids** = Sum of all cannabinoids without THC/CBD corrections.

**LOD** = Limit of Detection; **LOQ** = Limit of Quantitation; **ND** = Not Detected.

## Terpenes Extended

**Date Started:** 05/07/2024  
**Instrument:** GC-MS

**Date Completed:** 05/09/2024  
**Method:** TP-09.004.03

**Analyst:** Yuemin Wang Kovaleff  
**Deviation:** N/A

Terpene	Result (%)	Result (mg/g)	LOD (%)	LOQ (%)
beta-Myrcene	0.934	9.34	0.000992	0.00590
E-Caryophyllene	0.0817	0.817	0.00259	0.00590
D-Limonene	0.0798	0.798	0.00125	0.00590
Z-beta-Ocimene	0.0792	0.792	0.00239	0.00590
Carophyllene Oxide	0.0701	0.701	0.00134	0.00590
Linalool	0.0524	0.524	0.00180	0.00590
alpha-Bisabolol	0.0409	0.409	0.00219	0.00590
alpha-Humulene	0.0277	0.277	0.00128	0.00590
Guaiol	0.0253	0.253	0.00128	0.00590
beta-Pinene	0.0195	0.195	0.00122	0.00590
alpha-Terpineol	0.0168	0.168	0.00223	0.00590
Endo-Fenchyl Alcohol	0.00973	0.0973	0.00197	0.00590
alpha-Pinene	0.00824	0.0824	0.000496	0.00590
[+/-]-Borneol	<LOQ	<LOQ	0.00228	0.0118
E-beta-Ocimene	<LOQ	<LOQ	0.00244	0.00590
Terpinolene	<LOQ	<LOQ	0.000737	0.00590
[+/-]-Fenchone	<LOQ	<LOQ	0.00131	0.0118
Camphene	<LOQ	<LOQ	0.000652	0.00590
gamma-Terpineol	ND	ND	0.00106	0.00590
Isopulegol	ND	ND	0.00286	0.00590
Nerol	ND	ND	0.00186	0.00590
Geraniol	ND	ND	0.00184	0.00590
Pulegone	ND	ND	0.00224	0.00590
Valencene	ND	ND	0.00156	0.00590
Z-Nerolidol	ND	ND	0.00160	0.00590
E-Nerolidol	ND	ND	0.00135	0.00590
Eucalyptol	ND	ND	0.00179	0.00590
Sabinene	ND	ND	0.00201	0.00590
alpha-Phellandrene	ND	ND	0.000921	0.00590
Sabinene Hydrate	ND	ND	0.00197	0.00590
Isoborneol	ND	ND	0.00127	0.00590
Menthol	ND	ND	0.00197	0.00590
alpha-Cedrene	ND	ND	0.00179	0.00590
Geranyl Acetate	ND	ND	0.00277	0.00590
Cedrol	ND	ND	0.00240	0.00590
[+,N,-]-Camphor	ND	ND	0.00436	0.0177
delta-3-Carene	ND	ND	0.00193	0.00590
alpha-Terpinene	ND	ND	0.00181	0.00590
gamma-Terpinene	ND	ND	0.00134	0.00590
<b>Total Terpenes</b>	<b>1.46</b>	<b>14.6</b>		

## Heavy Metals

 **PASS**

**Date Started:** 05/07/2024  
**Instrument:** ICP-MS

**Date Completed:** 05/08/2024  
**Method:** TP-09.007.01

**Analyst:** Meagan Mattos  
**Deviation:** N/A

Heavy Metals	Result (ppb)	LOD (ppb)	LOQ (ppb)	Limit (ppb)	Status
Arsenic	ND	7.09	47.9	200	Pass
Cadmium	ND	4.26	47.9	200	Pass
Lead	<LOQ	3.91	47.9	500	Pass
Mercury	ND	3.41	24.0	100	Pass

Disclaimer: The results presented within this report pertain only to the sample(s) indicated, as received by Smithers AMS LLC. Smithers AMS LLC is responsible for the information provided in this report, unless indicated that the customer provided the information. This report shall not be reproduced, except in full, without the written approval of Smithers AMS LLC. Action limits used to dictate pass/fail criteria are set by the Massachusetts Cannabis Control Commission.

# Certificate of Analysis

## Microbial Impurities

✓ PASS

Date Started: 05/07/2024  
Instrument: TEMPO & Gene-Up

Date Completed: 05/11/2024  
Method: TP-09.010.01 & TP-09.011.01

Analyst: Meagan Mattos  
Deviation: N/A

Microbials	Result (CFU/g)	Limit (CFU/g)	Status
Coliforms	ND	1000	Pass
Bile-Tolerant Gram-Negative Bacteria	ND	1000	Pass
Yeast & Mold	2100	10000	Pass
Aerobic Bacteria	ND	100000	Pass
E.coli	ND		Pass
Salmonella	ND		Pass

## Mycotoxins

✓ PASS

Date Started: 05/08/2024  
Instrument: LC-MS/MS

Date Completed: 05/12/2024  
Method: TP-09.009.04

Analyst: Eric Steele  
Deviation: N/A

Mycotoxins	Result (ppb)	LOD (ppb)	LOQ (ppb)	Limit (ppb)	Status
Aflatoxin B1	ND	1.90	4.68		
Aflatoxin B2	ND	0.377	3.51		
Aflatoxin G1	ND	0.391	3.51		
Aflatoxin G2	ND	0.993	4.68		
Ochratoxin A	ND	1.08	3.51		
Total Mycotoxins	ND	0.377	3.51	20.0	Pass

## Pesticides

✓ PASS

Date Started: 05/08/2024  
Instrument: LC-MS/MS & GC-MS/MS

Date Completed: 05/12/2024  
Method: TP-09.008.02 & TP-09.009.04

Analyst: Yüemin Wang Kovaleff  
Deviation: N/A

Pesticide	Result (ppb)	LOD (ppb)	LOQ (ppb)	Limit (ppb)	Status
Bifenazate	ND	0.581	3.51	10.0	Pass
Bifenthrin	ND	1.23	3.51	10.0	Pass
Cyfluthrin	ND	0.466	2.93	10.0	Pass
Etoxazole	ND	0.852	3.51	10.0	Pass
Imazalil	ND	0.876	3.51	10.0	Pass
Imidacloprid	ND	0.410	3.51	10.0	Pass
Myclobutanil	ND	0.963	3.51	10.0	Pass
Spiromesifen	ND	1.03	3.51	10.0	Pass
Trifloxystrobin	ND	0.541	3.51	10.0	Pass



Eric Steele, Lab Director  
05/12/2024

END OF REPORT