



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

## Certificate of Analysis



**Customer:** Bay State Hemp Company

**Address:**

9 Aldrin Rd, Suite 8  
Plymouth MA 02360

**Phone:** 8008474427



**Sample ID:** 311  
**Sample Name:** Trifecta Blackout  
**Sample Type:** Ingestible  
**Received Date:** 12/24/2021  
**Report Date:** 12/24/2021  
**Client Batch ID:** 21213BOT  
**Client Sample Size:** 80.74 g  
**Unit Weight (g):** 28.5



### Results Summary

#### Cannabinoids

12/17/2021

TESTED

#### Heavy Metals

12/21/2021

✓ PASS

#### Microbial Impurities

12/23/2021

✓ PASS

#### Mycotoxins

12/22/2021

✓ PASS

#### Pesticides

12/22/2021

✓ PASS

#### Residual Solvents

12/21/2021

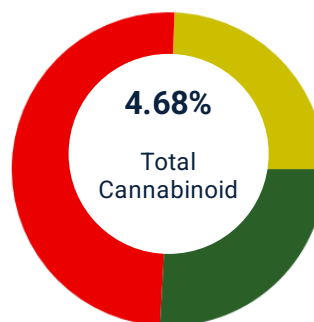
✓ PASS

#### Terpenes Extended

12/23/2021

TESTED

### Cannabinoid 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.



# Certificate of Analysis

## Cannabinoids

**Date Started:** 12/16/2021  
**Instrument:** HPLC-UV

**Date Completed:** 12/17/2021  
**Method:** TP-09.001.01 & TP-09.002.01

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

Cannabinoid	Result (%)	Result (mg/unit)	LOQ (mg/unit)
CBN	2.33	663	6.57
CBC	1.21	345	5.25
CBD	1.14	325	13.1
CBDVA	ND	ND	0.607
CBDV	ND	ND	0.607
CBDA	ND	ND	1.52
CBGA	ND	ND	0.759
CBG	ND	ND	0.759
Δ9-THCV	ND	ND	0.607
THCVA	ND	ND	0.607
CBNA	ND	ND	0.607
EXO-THC	ND	ND	0.607
Δ9-THC	ND	ND	1.52
Δ8-THC	ND	ND	0.759
CBL	ND	ND	0.607
THCA-A	ND	ND	1.52
CBCA	ND	ND	0.607
CBLA	ND	ND	0.607
<b>Total THC</b>	<b>ND</b>	<b>ND</b>	
<b>Total CBD</b>	<b>1.14</b>	<b>325</b>	
<b>Total Cannabinoids</b>	<b>4.68</b>	<b>1332</b>	

**Total THC** = Δ9-THC + Δ8-THC + (THCA 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.

## Heavy Metals

✓ **PASS**

**Date Started:** 12/21/2021  
**Instrument:** ICP-MS

**Date Completed:** 12/21/2021  
**Method:** TP-09.007.01

**Analyst:** Eric Steele  
**Deviation:** N/A

Heavy Metals	LOQ (ppb)	Limit (ppb)	Status
Arsenic	6.53	1500	Pass
Cadmium	6.53	500	Pass
Lead	6.53	1000	Pass
Mercury	6.53	1500	Pass

## Microbial Impurities

✓ **PASS**

**Date Started:** 12/20/2021  
**Instrument:** TEMPO & Gene-Up

**Date Completed:** 12/23/2021  
**Method:** TP-09.010.01 & TP-09.011.01

**Analyst:** Eric Steele  
**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	ND	10000	Pass
Aerobic Bacteria	ND	100000	Pass
E.coli	ND		Pass
Salmonella	ND		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

## Mycotoxins

✓ **PASS**

**Date Started:** 12/20/2021  
**Instrument:** LC-MS/MS

**Date Completed:** 12/22/2021  
**Method:** TP-09.009.01

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

Mycotoxins	LOQ (ppb)	Limit (ppb)	Status
Aflatoxin B1	3.53		
Aflatoxin B2	2.65		
Aflatoxin G1	2.65		
Aflatoxin G2	3.53		
Ochratoxin A	2.65		
<b>Total Mycotoxins</b>	<b>2.65</b>	<b>20</b>	<b>Pass</b>

## Pesticides

✓ **PASS**

**Date Started:** 12/20/2021  
**Instrument:** LC-MS/MS & GC-MS/MS

**Date Completed:** 12/22/2021  
**Method:** TP-09.008.01 & TP-09.009.01

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

Pesticide	LOQ (ppb)	Limit (ppb)	Status
Bifenazate	5.00	10	Pass
Bifenthrin	5.00	10	Pass
Cyfluthrin	5.00	10	Pass
Etiozazole	5.00	10	Pass
Imazalil	5.00	10	Pass
Imidacloprid	5.00	10	Pass
Myclobutanil	5.00	10	Pass
Spiromesifen	5.00	10	Pass
Trifloxystrobin	5.00	10	Pass

## Residual Solvents

✓ **PASS**

**Date Started:** 12/20/2021  
**Instrument:** HS-GC-MS

**Date Completed:** 12/21/2021  
**Method:** TP-09.005.01

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

Residual Solvent	LOQ (ppm)	Limit (ppb)	Status
Ethanol	11.5	5000	Pass
n-Butane	1.15	12	Pass
n-Propane	4.03	12	Pass
Iso-butane	2.18	12	Pass
Methanol	30.5	3000	Pass
n-Pentane	39.8	5000	Pass
Ethyl Ether	11.4	5000	Pass
Acetone	15.2	5000	Pass
Isopropyl Alcohol	10.5	5000	Pass
Acetonitrile	16.3	410	Pass
n-Hexane	19.1	290	Pass
Ethyl Acetate	8.81	5000	Pass
n-Heptane	8.56	5000	Pass
Toluene	3.37	890	Pass
<b>Total Xylenes</b>	<b>4.35</b>	<b>2170</b>	<b>Pass</b>

## Terpenes Extended

**Date Started:** 12/22/2021  
**Instrument:** GC-MS

**Date Completed:** 12/23/2021  
**Method:** TP-09.004.01

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

Terpene	Result (%)	Result (mg/unit)	LOQ (mg/unit)
D-Limonene	0.132	37.7	1.16
E-Caryophyllene	0.00940	2.68	1.16
alpha-Bisabolol	<LOQ	<LOQ	1.16
Linalool	<LOQ	<LOQ	1.16
alpha-Humulene	<LOQ	<LOQ	1.16
gamma-Terpineol	<LOQ	<LOQ	1.16
alpha-Terpineol	<LOQ	<LOQ	1.16
Z-Nerolidol	<LOQ	<LOQ	1.16
Z-beta-Ocimene	<LOQ	<LOQ	1.16
beta-Myrcene	<LOQ	<LOQ	1.16
E-Nerolidol	<LOQ	<LOQ	1.16
alpha-Cedrene	<LOQ	<LOQ	1.16
Guaiol	<LOQ	<LOQ	1.16
alpha-Phellandrene	<LOQ	<LOQ	1.16
[+/-]-Fenchone	<LOQ	<LOQ	2.32
delta-3-Carene	ND	ND	1.16
Camphene	ND	ND	1.16
gamma-Terpinene	ND	ND	1.16
beta-Pinene	ND	ND	1.16
Sabinene	ND	ND	1.16
Menthol	ND	ND	1.16
Isoborneol	ND	ND	1.16
Cedrol	ND	ND	1.16
Terpinolene	ND	ND	1.16
Eucalyptol	ND	ND	1.16
Pulegone	ND	ND	1.16
E-beta-Ocimene	ND	ND	1.16
Nerol	ND	ND	1.16
alpha-Pinene	ND	ND	1.16
Endo-Fenchyl Alcohol	ND	ND	1.16
Isopulegol	ND	ND	1.16
[+,-]-Camphor	ND	ND	3.49
Sabinene Hydrate	ND	ND	1.16
Valencene	ND	ND	1.16
Geranyl Acetate	ND	ND	1.16
alpha-Terpinene	ND	ND	1.16
[+/-]-Borneol	ND	ND	2.32
Carophyllene Oxide	ND	ND	1.16
Geraniol	ND	ND	1.16
<b>Total Terpenes</b>	<b>0.141</b>	<b>40.4</b>	



Eric Steele  
 Quality Manager  
 12/24/2021

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.



**Smithers AMS LLC**

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

# Certificate of Analysis

---

END OF REPORT

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.

