



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

# Certificate of Analysis



**Customer:** Bay State Extracts

**Address:**

3065 Cranberry Highway  
 East Wareham MA 02538

**Phone:** 800-847-4427

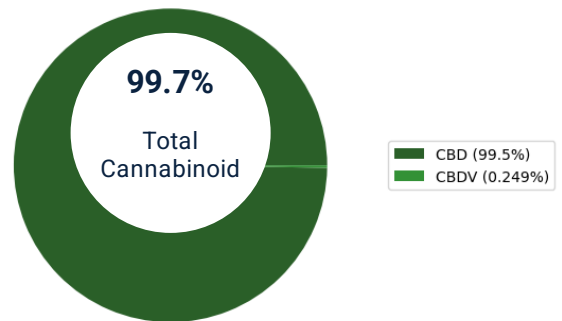


**Sample ID:** 2297  
**Sample Name:** CBD Isolate 13956-29-1  
**Sample Type:** Isolate  
**Received Date:** 09/16/2022  
**Report Date:** 09/22/2022  
**Client Batch ID:** 22259D  
**Client Sample Size:**

## Results Summary

<b>Cannabinoids</b>	TESTED
09/22/2022	
<b>Heavy Metals</b>	✓ PASS
09/19/2022	
<b>Microbial Impurities</b>	✓ PASS
09/22/2022	
<b>Residual Solvents</b>	✓ PASS
09/22/2022	
<b>Mycotoxins</b>	✓ PASS
09/22/2022	
<b>Pesticides</b>	✓ PASS
09/22/2022	

## 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.





SMITHERS

Smithers AMS LLC

790 Main St

Wareham, MA 02571

License #: IL281355

Phone: 508-295-2550

# Certificate of Analysis

## Cannabinoids

Date Started: 09/19/2022

Instrument: UPLC-PDA

Date Completed: 09/22/2022

Method: TP-09.001.03 & TP-09.012.02

Analyst: Yuemin Wang Kovaleff

Deviation: N/A

Cannabinoid	Result (%)	Result (mg/g)	LOQ (%)
CBD	99.49	995	0.0492
CBDV	0.249	2.49	0.0197
CBDVA	ND	ND	0.0197
CBDA	ND	ND	0.0492
CBGA	ND	ND	0.0246
CBG	ND	ND	0.0246
Δ9-THCV	ND	ND	0.0197
Δ8-THCV	ND	ND	0.0246
THCVA	ND	ND	0.0197
CBN	ND	ND	0.0246
CBNA	ND	ND	0.0197
EXO-THC	ND	ND	0.0197
Δ9-THC	ND	ND	0.0492
Δ8-THC	ND	ND	0.0246
CBC	ND	ND	0.0197
CBL	ND	ND	0.0197
THCA-A	ND	ND	0.0492
CBCA	ND	ND	0.0197
CBLA	ND	ND	0.0197
<b>Total THC</b>	<b>ND</b>	<b>ND</b>	
<b>Total CBD</b>	<b>99.49</b>	<b>995</b>	
<b>Total Cannabinoids</b>	<b>99.74</b>	<b>997</b>	

Total THC = Δ9-THC + Δ8-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.

## Heavy Metals

PASS

Date Started: 09/19/2022

Instrument: ICP-MS

Date Completed: 09/19/2022

Method: TP-09.007.01

Analyst: Lana Rivera

Deviation: N/A

Heavy Metals	LOQ (ppb)	Limit (ppb)	Status
Arsenic	45.1	200	Pass
Cadmium	45.1	200	Pass
Lead	45.1	500	Pass
Mercury	22.6	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.





SMITHERS

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

# Certificate of Analysis

## Microbial Impurities

✓ PASS

Date Started: 09/19/2022  
Instrument: TEMPO & Gene-Up

Date Completed: 09/22/2022  
Method: TP-09.010.01 & TP-09.011.01

Analyst: Elliot Henderson  
Deviation: N/A

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

## Residual Solvents

✓ PASS

Date Started: 09/19/2022  
Instrument: HS-GC-MS

Date Completed: 09/22/2022  
Method: TP-09.005.03

Analyst: Yuemin Wang Kovaleff  
Deviation: N/A

Residual Solvent	LOQ (ppm)	Limit (ppm)	Status
Ethanol	92.1	5000	Pass
n-Butane	1.53	12.0	Pass
n-Propane	1.53	12.0	Pass
Iso-butane	1.53	12.0	Pass
Methanol	92.1	3000	Pass
n-Pentane	92.1	5000	Pass
Ethyl Ether	92.1	5000	Pass
Acetone	92.1	5000	Pass
Isopropyl Alcohol	92.1	5000	Pass
Acetonitrile	92.1	410	Pass
n-Hexane	92.1	290	Pass
Ethyl Acetate	92.1	5000	Pass
n-Heptane	92.1	5000	Pass
Toluene	92.1	890	Pass
<b>Total Xylenes</b>	<b>46.0</b>	<b>2170</b>	<b>Pass</b>

## Mycotoxins

✓ PASS

Date Started: 09/19/2022  
Instrument: LC-MS/MS

Date Completed: 09/22/2022  
Method: TP-09.009.01

Analyst: Yuemin Wang Kovaleff  
Deviation: N/A

Mycotoxins	LOQ (ppb)	Limit (ppb)	Status
Aflatoxin B1	4.78		
Aflatoxin B2	3.59		
Aflatoxin G1	3.59		
Aflatoxin G2	4.78		
Ochratoxin A	3.59		
<b>Total Mycotoxins</b>	<b>3.59</b>	<b>20.0</b>	<b>Pass</b>

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

Smithers AMS LLC

790 Main St

Wareham, MA 02571

License #: IL281355

Phone: 508-295-2550

# Certificate of Analysis

## Pesticides

**PASS**

**Date Started:** 09/19/2022

**Instrument:** LC-MS/MS & GC-MS/MS

**Date Completed:** 09/22/2022

**Method:** TP-09.008.01 & TP-09.009.01

**Analyst:** Yuemin Wang Kovaleff

**Deviation:** N/A

Pesticide	LOQ (ppb)	Limit (ppb)	Status
Bifenazate	3.59	10.0	Pass
Bifenthrin	3.59	10.0	Pass
Cyfluthrin	2.99	10.0	Pass
Etoxazole	3.59	10.0	Pass
Imazalil	3.59	10.0	Pass
Imidacloprid	3.59	10.0	Pass
Myclobutanil	3.59	10.0	Pass
Spiromesifen	3.59	10.0	Pass
Trifloxystrobin	3.59	10.0	Pass

Eric Steele, Lab Director  
09/22/2022

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.

