



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

License #: MDAR 25200133P

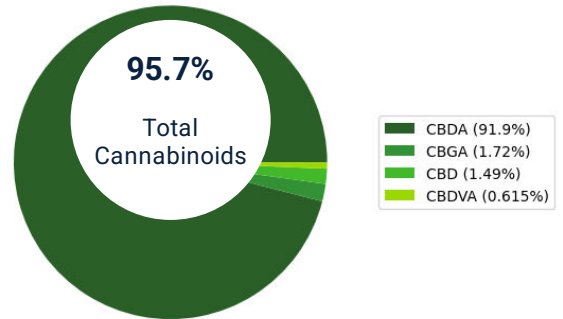


Sample ID: 6431
Sample Name: CBDA Isolate
Sample Type: Isolate
Received Date: 08/01/2023
Report Date: 08/06/2023
METRC ID: N/A
Client Batch ID: 23208A
Client Sample Size: 5.5 g

Results Summary

Cannabinoids	TESTED
08/02/2023	
Heavy Metals	✓ PASS
08/05/2023	
Microbial Impurities	✓ PASS
08/06/2023	
Residual Solvents	✓ PASS
08/03/2023	
Mycotoxins	✓ PASS
08/04/2023	

Cannabinoid Distribution (%)



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Cannabinoids

Date Started: 08/01/2023

Instrument: UPLC-PDA

Date Completed: 08/02/2023

Method: TP-09.001.03 & TP-09.012.04

Analyst: Yuemin Wang Kovaleff

Deviation: N/A

Cannabinoid	Result (%)	Result (mg/g)	LOD (%)	LOQ (%)
CBDA	91.9	919	0.142	2.25
CBGA	1.72	17.2	0.00441	0.0563
CBD	1.49	14.9	0.00871	0.113
CBDVA	0.615	6.15	0.00757	0.0450
CBDV	ND	ND	0.0215	0.0450
CBG	ND	ND	0.00489	0.0563
Δ9-THCV	ND	ND	0.00607	0.0450
Δ8-THCV	ND	ND	0.0110	0.0450
THCVA	ND	ND	0.00478	0.0450
CBN	ND	ND	0.00770	0.0563
CBNA	ND	ND	0.00594	0.0450
Exo-THC	ND	ND	0.00900	0.0450
Δ9-THC	ND	ND	0.0208	0.113
Δ8-THC	ND	ND	0.0197	0.0563
CBL	ND	ND	0.0133	0.0450
THCA-A	ND	ND	0.0180	0.113
CBC	ND	ND	0.00533	0.0450
CBCA	ND	ND	0.0145	0.0450
Total THC	ND	ND		
Total CBD	82.1	821		
Total Cannabinoids	95.7	957		

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: 08/03/2023

Instrument: ICP-MS

Date Completed: 08/05/2023

Method: TP-09.007.01

Analyst: Meagan Mattos

Deviation: N/A

Heavy Metals	LOQ (ppb)	Limit (ppb)	Status
Arsenic	47.8	200	Pass
Cadmium	47.8	200	Pass
Lead	47.8	500	Pass
Mercury	23.9	100	Pass

Microbial Impurities

✓ PASS

Date Started: 08/02/2023

Instrument: TEMPO & Gene-Up

Date Completed: 08/06/2023

Method: TP-09.010.01 & TP-09.011.01

Analyst: Lana Rivera

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

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Residual Solvents

✓ PASS

Date Started: 08/02/2023
Instrument: HS-GC-MS

Date Completed: 08/03/2023
Method: TP-09.005.03

Analyst: Yuemin Wang Kovaleff
Deviation: N/A

Residual Solvent	LOQ (ppm)	Limit (ppm)	Status
n-Propane	1.54	12.0	Pass
Iso-butane	1.54	12.0	Pass
n-Butane	1.54	12.0	Pass
Methanol	92.8	3000	Pass
Ethylene Oxide	0.618		Pass
n-Pentane	92.8	5000	Pass
Ethanol	92.8	5000	Pass
Ethyl Ether	92.8	5000	Pass
Acetone	92.8	5000	Pass
Isopropyl Alcohol	92.8	5000	Pass
Acetonitrile	92.8	410	Pass
Methylene Chloride	0.618	600	Pass
n-Hexane	92.8	290	Pass
Ethyl Acetate	92.8	5000	Pass
Chloroform	0.618	60.0	Pass
1,2-Dichloroethane	0.618	1870	Pass
Benzene	0.618		Pass
n-Heptane	92.8	5000	Pass
Trichloroethylene	0.618	80.0	Pass
Toluene	92.8	890	Pass
Total Xylenes	46.4	2170	Pass

Mycotoxins

✓ PASS

Date Started: 08/03/2023
Instrument: LC-MS/MS

Date Completed: 08/04/2023
Method: TP-09.009.01

Analyst: Yuemin Wang Kovaleff
Deviation: N/A

Mycotoxins	LOQ (ppb)	Limit (ppb)	Status
Aflatoxin B1	4.40		
Aflatoxin B2	3.30		
Aflatoxin G1	3.30		
Aflatoxin G2	4.40		
Ochratoxin A	3.30		
Total Mycotoxins	3.30	20.0	Pass

Eric Steele, Lab Director
08/06/2023

END OF REPORT

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