



Customer: HAVN
Extracts
Address:
125 Southbridge Rd
North Oxford MA 01537
Phone:
License #: MP281627



Sample ID: 47309
Sample Name: M00004550935: Bulk Vape - Cartridge Blueberry Muffin
Sample Type: Vape
Received Date: 05/26/2026
Report Date: 05/30/2026
METRC ID: 1A40A03000048A9000021536
METRC Source ID: 1A40A03000048A9000021535
Client Batch ID: BM-052126-V
Sanitization Method: None
Client Sample Size: 6 each

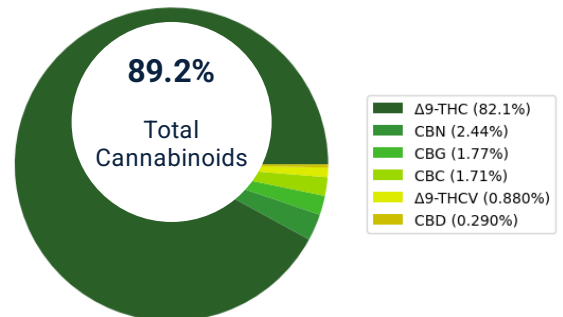
Results Summary

Cannabinoids	TESTED
05/28/2026	
Vitamin E Acetate	✓ PASS
05/27/2026	
Terpenes	TESTED
05/28/2026	
Heavy Metals	✓ PASS
05/28/2026	
Microbial Impurities	✓ PASS
05/30/2026	
Residual Solvents	✓ PASS
05/28/2026	
Mycotoxins	✓ PASS
05/29/2026	

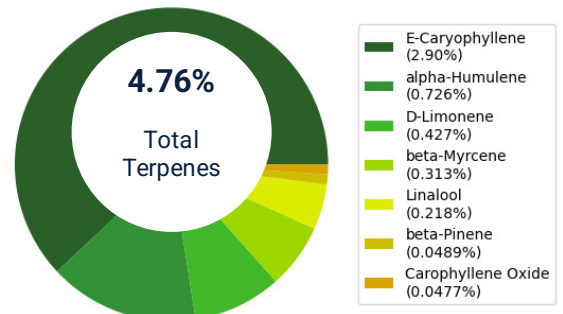
Certificate of Analysis



Cannabinoid Distribution (%)



Terpene Distribution (%)



Certificate of Analysis

Cannabinoids

Date Started: 05/27/2026
Instrument: UPLC-PDA

Date Completed: 05/28/2026
Method: TP-09.001.06 & TP-09.012.07

Analyst: Lana Rivera (B144852)
Deviation: N/A

Cannabinoid	Result (%)	Result (mg/g)	LOD (%)	LOQ (%)
Δ9-THC	82.1	821	0.259	1.40
CBN	2.44	24.4	0.00961	0.0702
CBG	1.77	17.7	0.00610	0.0702
CBC	1.71	17.1	0.00665	0.0561
Δ9-THCV	0.880	8.80	0.00757	0.0561
CBD	0.290	2.90	0.0109	0.140
CBDVA	ND	ND	0.00944	0.0561
CBDV	ND	ND	0.0268	0.0561
CBDA	ND	ND	0.00885	0.140
CBGA	ND	ND	0.00550	0.0702
Δ8-THCV	ND	ND	0.0137	0.0561
THCVA	ND	ND	0.00596	0.0561
CBNA	ND	ND	0.00741	0.0561
Exo-THC	ND	ND	0.0112	0.0561
Δ8-THC	ND	ND	0.0246	0.0702
CBL	ND	ND	0.0166	0.0561
THCA	ND	ND	0.0225	0.140
CBCA	ND	ND	0.0181	0.0561
Total THC	82.1	821		
Total CBD	0.290	2.90		
Total Cannabinoids	89.2	892		

Total THC = Δ9-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.

Vitamin E Acetate

 **PASS**

Date Started: 05/27/2026
Instrument: HPLC-PDA

Date Completed: 05/27/2026
Method: TP-09.006.04

Analyst: Meagan Mattos (B154555)
Deviation: N/A

Analyte	Result (ppm)	LOD (ppm)	LOQ (ppm)	Status
Tocopheryl Acetate	ND	43.7	144	Pass

Certificate of Analysis

Terpenes

Date Started: 05/27/2026
Instrument: GC-MS

Date Completed: 05/28/2026
Method: TP-09.004.06

Analyst: Lana Rivera (B144852)
Deviation: N/A

Terpene	Result (%)	Result (mg/g)	LOD (%)	LOQ (%)
E-Caryophyllene	2.90	29.0	0.00633	0.0144
alpha-Humulene	0.726	7.26	0.00311	0.0144
D-Limonene	0.427	4.27	0.00304	0.0144
beta-Myrcene	0.313	3.13	0.00242	0.0144
Linalool	0.218	2.18	0.00439	0.0144
beta-Pinene	0.0489	0.489	0.00299	0.0144
Carophyllene Oxide	0.0477	0.477	0.00326	0.0144
alpha-Bisabolol	0.0295	0.295	0.00534	0.0144
Eucalyptol	0.0146	0.146	0.00437	0.0144
Camphene	<LOQ	<LOQ	0.00159	0.0144
Terpinolene	<LOQ	<LOQ	0.00180	0.0144
Guaiol	<LOQ	<LOQ	0.00314	0.0144
gamma-Terpinene	ND	ND	0.00326	0.0144
alpha-Pinene	ND	ND	0.00121	0.0144
E-beta-Ocimene	ND	ND	0.00596	0.0144
Isopulegol	ND	ND	0.00699	0.0144
Geraniol	ND	ND	0.00449	0.0144
Z-Nerolidol	ND	ND	0.00391	0.0144
E-Nerolidol	ND	ND	0.00329	0.0144
delta-3-Carene	ND	ND	0.00471	0.0144
alpha-Terpinene	ND	ND	0.00442	0.0144
Z-beta-Ocimene	ND	ND	0.00584	0.0144
Total Terpenes	4.76	47.6		

Heavy Metals

✓ **PASS**

Date Started: 05/27/2026
Instrument: ICP-MS

Date Completed: 05/28/2026
Method: TP-09.007.04

Analyst: Sydney Murphy (B168056)
Deviation: N/A

Heavy Metals	Result (ppb)	LOD (ppb)	LOQ (ppb)	Limit (ppb)	Status
Arsenic	<LOQ	12.7	86.1	200	Pass
Cadmium	ND	76.5	86.1	200	Pass
Lead	ND	7.03	86.1	500	Pass
Mercury	ND	6.13	43.1	100	Pass

Microbial Impurities

✓ **PASS**

Date Started: 05/27/2026
Instrument: TEMPO & Gene-Up

Date Completed: 05/30/2026
Method: TP-09.010.02 & TP-09.011.03

Analyst: Sydney Murphy (B168056)
Deviation: N/A

Microbials	Result (CFU/g)	Limit (CFU/g)	Status
Coliforms	ND	100	Pass
Bile-Tolerant Gram-Negative Bacteria	ND	100	Pass
Yeast & Mold	ND	1000	Pass
Aerobic Bacteria	ND	10000	Pass
E.coli	ND		Pass
Salmonella	ND		Pass

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Certificate of Analysis

Residual Solvents

✓ **PASS**

Date Started: 05/27/2026
Instrument: HS-GC-MS

Date Completed: 05/28/2026
Method: TP-09.005.04

Analyst: Lana Rivera (B144852)
Deviation: N/A

Residual Solvent	Result (ppm)	LOD (ppm)	LOQ (ppm)	Limit (ppm)	Status
n-Propane	<LOQ	0.434	1.70	12.0	Pass
Iso-butane	ND	0.285	1.70	12.0	Pass
n-Butane	ND	0.187	1.70	12.0	Pass
Methanol	ND	40.5	103	3000	Pass
Ethylene Oxide	ND	0.683	1.37		Pass
n-Pentane	ND	27.5	103	5000	Pass
Ethanol	ND	19.0	103	5000	Pass
Ethyl Ether	ND	25.9	103	5000	Pass
Acetone	ND	18.6	103	5000	Pass
Isopropyl Alcohol	ND	23.2	103	5000	Pass
Acetonitrile	ND	14.4	103	410	Pass
Methylene Chloride	ND	0.683	1.37	600	Pass
n-Hexane	ND	27.9	103	290	Pass
Ethyl Acetate	ND	16.1	103	5000	Pass
Chloroform	ND	0.683	1.37	60.0	Pass
1,2-Dichloroethane	ND	0.683	1.37	1870	Pass
Benzene	ND	0.683	1.37		Pass
n-Heptane	ND	29.8	103	5000	Pass
Trichloroethylene	ND	0.683	1.37	80.0	Pass
Toluene	ND	11.8	103	890	Pass
Total Xylenes	ND	20.2	51.3	2170	Pass

Mycotoxins

✓ **PASS**

Date Started: 05/27/2026
Instrument: LC-MS/MS

Date Completed: 05/29/2026
Method: TP-09.009.05

Analyst: Lana Rivera (B144852)
Deviation: N/A

Mycotoxins	Result (ppb)	LOD (ppb)	LOQ (ppb)	Limit (ppb)	Status
Aflatoxin B1	ND	0.823	2.71		
Aflatoxin B2	ND	0.823	2.71		
Aflatoxin G1	ND	0.823	2.71		
Aflatoxin G2	ND	0.823	2.71		
Ochratoxin A	ND	0.823	2.71		
Total Mycotoxins	ND	0.823	2.71	20.0	Pass



Eric Steele, Lab Director
 05/30/2026

END OF REPORT