



California Ag Labs  
430 C St  
Marysville, CA 95901

(530) 599-9001  
/www.calaglabs.com  
Lic# C8-0000001-LIC

QA Testing

1 of 5

## Boundary Waters Hop Water

Sample ID: 2404CRG0896.2400

Strain: -

Matrix: Ingestible

Type: Beverage

Sample Size: 1 units; Batch:

Produced:

Collected:

Received: 04/16/2024

Completed: 04/19/2024

Batch#:

Client

Vireo Health, Inc.

Lic. #

201 South 9th Street  
Minneapolis, MN 55402



### Summary

Test	Date Tested	Result
Batch		Pass
Cannabinoids	04/17/2024	Complete
Residual Solvents	04/18/2024	Pass
Microbials	04/18/2024	Pass
Mycotoxins	04/19/2024	Pass
Pesticides	04/19/2024	Pass
Heavy Metals	04/18/2024	Pass

### Cannabinoids

Complete

<b>3.157 mg/serving</b> 3.157 mg/container <b>Total THC</b>	<b>3.071 mg/serving</b> 3.071 mg/container <b>Total CBD</b>	<b>6.228 mg/serving</b> 6.228 mg/container <b>Total Cannabinoids</b>	<b>6.228 mg/serving</b> 6.228 mg/container <b>Total Unconverted Cannabinoids</b>
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Analyte	LOD	LOQ	Results	Results	Results	Results	Results	Results
	mg/g	mg/g	%	mg/g	mg/mL	mg/unit	mg/serving	mg/container
THCa	0.0003	0.0004	ND	ND	ND	ND	ND	ND
Δ9-THC	0.0003	0.0004	0.001	0.009	0.009	3.157	3.157	3.157
Δ8-THC	0.0003	0.0004	ND	ND	ND	ND	ND	ND
THCV	0.0004	0.0004	ND	ND	ND	ND	ND	ND
CBDa	0.0004	0.0004	ND	ND	ND	ND	ND	ND
CBD	0.0002	0.0004	0.001	0.008	0.009	3.071	3.071	3.071
CBDV	0.0004	0.0004	ND	ND	ND	ND	ND	ND
CBN	0.0001	0.0004	ND	ND	ND	ND	ND	ND
CBGa	0.0004	0.0004	ND	ND	ND	ND	ND	ND
CBG	0.0003	0.0004	ND	ND	ND	ND	ND	ND
CBC	0.0004	0.0004	ND	ND	ND	ND	ND	ND
<b>Total</b>			<b>0.002</b>			<b>6.228</b>	<b>6.228</b>	<b>6.228</b>

Notes: 1 Unit = Beverage, 366.786g. 1 mL = 1.0332g. 1 unit(s) per serving. 1 serving(s) per container.

Method: HPLC SOP-420

Total THC means the sum of THC, delta 8 THC, and THCA. Total THC is calculated using the following equation: Total THC (mg/g) = [(delta 8-THCA concentration (mg/g) + delta 9-THCA concentration (mg/g)) x 0.877] + [delta 8-THC concentration (mg/g) + delta 9-THC concentration (mg/g)]

LOQ = Limit of Quantitation; The reported result is based on a sample weight with the applicable moisture content for that sample; Unless otherwise stated all quality control samples performed within specifications established by the Laboratory. Measurement uncertainty is not taken into account when statements of conformity (Pass/fail) are made in this report. The decision rule, i.e. All statements of conformity, in this report are made according to the action limits set by CA-DCC (Pass-results within limits/specifications, Fail-results exceed limits/specifications) and can be found within California Code of Regulations Title 4 Division 19. Department of Cannabis Control

<b>NT</b> Not Tested <b>Moisture Content</b>	<b>NT</b> Not Tested <b>Water Activity</b>	<b>Not Tested</b> <b>Foreign Matter</b>
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ISO/IEC 17025:2017 ACCREDITED CRT# 6099.01

Ronald Montez  
Lab Director  
04/19/2024

Seth Dixon, PhD  
Chief Chemist  
04/19/2024

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### Pesticides

Pass

Analyte	LOD	LOQ	Limit	Results	Status	Analyte	LOD	LOQ	Limit	Results	Status
	µg/g	µg/g	µg/g	µg/g			µg/g	µg/g	µg/g	µg/g	
Abamectin	0.004	0.031	0.300	ND	Pass	Fludioxonil	0.004	0.031	30.000	ND	Pass
Acephate	0.008	0.031	5.000	ND	Pass	Hexythiazox	0.003	0.031	2.000	ND	Pass
Acequinocyl	0.007	0.031	4.000	ND	Pass	Imazalil	0.010	0.031	0.010	ND	Pass
Acetamiprid	0.004	0.031	5.000	ND	Pass	Imidacloprid	0.005	0.031	3.000	ND	Pass
Aldicarb	0.010	0.031	0.010	ND	Pass	Kresoxim Methyl	0.007	0.031	1.000	ND	Pass
Azoxystrobin	0.006	0.031	40.000	ND	Pass	Malathion	0.009	0.031	5.000	ND	Pass
Bifenazate	0.005	0.031	5.000	ND	Pass	Metalaxyl	0.004	0.031	15.000	ND	Pass
Bifenthrin	0.007	0.031	0.500	ND	Pass	Methiocarb	0.010	0.031	0.010	ND	Pass
Boscalid	0.006	0.031	10.000	ND	Pass	Methomyl	0.006	0.031	0.100	ND	Pass
Captan	0.051	0.062	5.000	ND	Pass	Mevinphos	0.015	0.031	0.015	ND	Pass
Carbaryl	0.003	0.031	0.500	ND	Pass	Myclobutanil	0.007	0.031	9.000	ND	Pass
Carbofuran	0.010	0.031	0.010	ND	Pass	Naled	0.004	0.031	0.500	ND	Pass
Chlorantraniliprole	0.006	0.031	40.000	ND	Pass	Oxamyl	0.004	0.031	0.200	ND	Pass
Chlordane	0.030	0.062	0.030	ND	Pass	Paclobutrazol	0.010	0.031	0.010	ND	Pass
Chlorfenapyr	0.030	0.062	0.030	ND	Pass	Parathion Methyl	0.030	0.062	0.030	ND	Pass
Chlorpyrifos	0.010	0.031	0.010	ND	Pass	Pentachloronitrobenzene	0.024	0.062	0.200	ND	Pass
Clofentezine	0.013	0.031	0.500	ND	Pass	Permethrin	0.012	0.031	20.000	ND	Pass
Coumaphos	0.010	0.031	0.010	ND	Pass	Phosmet	0.005	0.031	0.200	ND	Pass
Cyfluthrin	0.039	0.062	1.000	ND	Pass	Piperonyl Butoxide	0.005	0.031	8.000	ND	Pass
Cypermethrin	0.036	0.062	1.000	ND	Pass	Prallethrin	0.008	0.031	0.400	ND	Pass
Daminozide	0.030	0.062	0.030	ND	Pass	Propiconazole	0.006	0.031	20.000	ND	Pass
Diazinon	0.004	0.031	0.200	ND	Pass	Propoxur	0.010	0.031	0.010	ND	Pass
Dichlorvos	0.010	0.031	0.010	ND	Pass	Pyrethrins	0.006	0.031	1.000	ND	Pass
Dimethoate	0.010	0.031	0.010	ND	Pass	Pyridaben	0.004	0.031	3.000	ND	Pass
Dimethomorph	0.012	0.031	20.000	ND	Pass	Spinetoram	0.017	0.031	3.000	ND	Pass
Ethoprophos	0.010	0.031	0.010	ND	Pass	Spinosad	0.017	0.031	3.000	ND	Pass
Etofenprox	0.010	0.031	0.010	ND	Pass	Spiromesifen	0.007	0.031	12.000	ND	Pass
Etoazole	0.003	0.031	1.500	ND	Pass	Spirotetramat	0.005	0.031	13.000	ND	Pass
Fenhexamid	0.011	0.031	10.000	ND	Pass	Spiroxamine	0.010	0.031	0.010	ND	Pass
Fenoxycarb	0.010	0.031	0.010	ND	Pass	Tebuconazole	0.006	0.031	2.000	ND	Pass
Fenpyroximate	0.003	0.031	2.000	ND	Pass	Thiacloprid	0.010	0.031	0.010	ND	Pass
Fipronil	0.010	0.031	0.010	ND	Pass	Thiamethoxam	0.006	0.031	4.500	ND	Pass
Flonicamid	0.008	0.031	2.000	ND	Pass	Trifloxystrobin	0.002	0.031	30.000	ND	Pass

Date Tested: 04/19/2024

Method: LC-MS/MS& GC-MS/MS SOP-426. LOQ = Limit of Quantitation; Unless otherwise stated all quality control samples performed within specifications established by the Laboratory. Measurement uncertainty is not taken into account when statements of conformity (Pass/fail) are made in this report. The decision rule, i.e. All statements of conformity, in this report are made according to the action limits set by CA-DCC (Pass-results within limits/specifications, Fail-results exceed limits/specifications) and can be found within California Code of Regulations Title 4 Division 19. Department of Cannabis Control



ISO/IEC 17025:2017 ACCREDITED CRT# 6099.01

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## Boundary Waters Hop Water

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Strain: -

Matrix: Ingestible

Type: Beverage

Sample Size: 1 units; Batch:

Produced:

Collected:

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Completed: 04/19/2024

Batch#:

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Lic. #

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Minneapolis, MN 55402

### Microbials

Pass

#### Analyte

#### Results

#### Status

Shiga toxin-producing E. Coli

Not Detected in 1g

Pass

Salmonella SPP

Not Detected in 1g

Pass

Date Tested: 04/18/2024

#### Analyte

#### Results

#### Status

Aerobic Bacteria

CFU/g

Not Detected

Lactic Acid Bacteria (heterofermentative)

<1 CFU/g

Not Detected

Lactic Acid Bacteria (homofermentative)

<1 CFU/g

Not Detected

Rapid Yeast & Mold (Yeast)

<1 CFU/g

Not Detected

Rapid Yeast & Mold (Mold)

<1 CFU/g

Not Detected

Date Tested: 04/18/2024

Microbial Analytes reported as Detected / Not Detected are not considered in the Pass / Fail determination for Microbial Testing

### Mycotoxins

Pass

#### Analyte

#### LOD

#### LOQ

#### Limit

#### Results

#### Status

B1

µg/kg

µg/kg

µg/kg

µg/kg

ND

B2

4.96

5

ND

Tested

G1

3.56

5

ND

Tested

G2

4.92

5

ND

Tested

G2

4.02

5

ND

Tested

Total Aflatoxins

4.96

5

20

ND

Pass

Ochratoxin A

4.95

5

20

ND

Pass

Date Tested: 04/19/2024

Method: LC-MS/MS SOP-425. LOQ = Limit of Quantitation; Unless otherwise stated all quality control samples performed within specifications established by the Laboratory. Measurement uncertainty is not taken into account when statements of conformity (Pass/fail) are made in this report. The decision rule, i.e. All statements of conformity, in this report are made according to the action limits set by CA-DCC (Pass-results within limits/specifications, Fail-results exceed limits/specifications) and can be found within California Code of Regulations Title 4 Division 19. Department of Cannabis Control

### Heavy Metals

Pass

#### Analyte

#### LOD

#### LOQ

#### Limit

#### Results

#### Status

Arsenic

µg/g

µg/g

µg/g

µg/g

ND

Cadmium

0.0637

0.0976565

1.5

ND

Pass

Lead

0.06455

0.0976565

0.5

ND

Pass

Mercury

0.07025

0.0976565

0.5

ND

Pass

Mercury

0.0756

0.0976565

3

ND

Pass

Date Tested: 04/18/2024

Method: ICP-MS SOP-423. LOQ = Limit of Quantitation; Unless otherwise stated all quality control samples performed within specifications established by the Laboratory. Measurement uncertainty is not taken into account when statements of conformity (Pass/fail) are made in this report. The decision rule, i.e. All statements of conformity, in this report are made according to the action limits set by CA-DCC (Pass-results within limits/specifications, Fail-results exceed limits/specifications) and can be found within California Code of Regulations Title 4 Division 19. Department of Cannabis Control



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## Boundary Waters Hop Water

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Strain: -

Matrix: Ingestible

Type: Beverage

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Produced:

Collected:

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### Residual Solvents

Pass

Analyte	LOD	LOQ	Limit	Results	Status
	µg/g	µg/g	µg/g	µg/g	
1,2-Dichloro-Ethane	0.225	0.469	1	ND	Pass
Acetone	12.462	46.873	5000	ND	Pass
Acetonitrile	16.464	46.873	410	ND	Pass
Benzene	0.239	0.469	1	ND	Pass
Butane	16.937	46.873	5000	ND	Pass
Chloroform	0.247	0.469	1	ND	Pass
Ethanol	13.762	46.873	5000	1389.186	Pass
Ethyl-Acetate	12.547	46.873	5000	ND	Pass
Ethyl-Ether	28.899	46.873	5000	ND	Pass
Ethylene Oxide	0.225	0.469	1	ND	Pass
Heptane	11.723	46.873	5000	ND	Pass
Isopropanol	12.209	46.873	5000	ND	Pass
Methanol	22.99	46.873	3000	ND	Pass
Methylene-Chloride	0.258	0.469	1	ND	Pass
n-Hexane	29.171	46.873	290	ND	Pass
Pentane	15.568	46.873	5000	ND	Pass
Propane	17.861	46.873	5000	ND	Pass
Toluene	29.384	46.873	890	ND	Pass
Trichloroethene	0.274	0.469	1	ND	Pass
Xylenes	27.174	46.873	2170	ND	Pass

Date Tested: 04/18/2024

Method: HS-GCMS SOP-429. LOQ = Limit of Quantitation; Unless otherwise stated all quality control samples performed within specifications established by the Laboratory. Measurement uncertainty is not taken into account when statements of conformity (Pass/fail) are made in this report. The decision rule, i.e. All statements of conformity, in this report are made according to the action limits set by CA-DCC (Pass-results within limits/specifications, Fail-results exceed limits/specifications) and can be found within California Code of Regulations Title 4 Division 19. Department of Cannabis Control



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### Heavy Metals

Pass

Analyte	LOD	LOQ	Limit	Results	Status
	µg/g	µg/g	µg/g	µg/g	
Arsenic	0.0637	0.0976565	1.5	ND	Pass
Cadmium	0.06455	0.0976565	0.5	ND	Pass
Lead	0.07025	0.0976565	0.5	ND	Pass
Mercury	0.0756	0.0976565	3	ND	Pass

Date Tested: 04/18/2024

Method: ICP-MS SOP-423. LOQ = Limit of Quantitation; Unless otherwise stated all quality control samples performed within specifications established by the Laboratory. Measurement uncertainty is not taken into account when statements of conformity (Pass/fail) are made in this report. The decision rule, i.e. All statements of conformity, in this report are made according to the action limits set by CA-DCC (Pass-results within limits/specifications, Fail-results exceed limits/specifications) and can be found within California Code of Regulations Title 4 Division 19. Department of Cannabis Control



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