

## **Certificate of Analysis**

### **ANALYZED BY:**

Anresco Laboratories 1375 Van Dyke Avenue, San Francisco, CA 94124 C8-0000052-LIC



### **CUSTOMER:**

Surly Brewing Company 4811 Dusharme Dr Brooklyn Center, MN 55429

### SAMPLE INFORMATION

			Date Collected: 09/04/2024 Date Received: 09/04/2024 Date Reported: 09/06/2024	
TEST SUM		• Pass	Microbiological Screen:	Pass
		✓ Pass	Residual Solvent Screen:	✓ Pass
Pesticide Residue Screen: Heavy Metal Screen:		Pass	Foreign Material:	Pass
Mycotoxin Sc	reen:	🕑 Pass	-	

Cannabinoid Profile **O** Pass

Method:	MF-CHEM-15
Instrument:	Liquid Chromatography Diode Array Detector (LC-DAD)
Limit of Detection	0.0008 mg/g
Limit of Quantitation	0.0025 mg/g

Cannabinoid	mg/g	%	mg/ml	mg/serving	mg/package	Labeled mg/serving	serving)	Status
Δ8-THC	ND	ND	ND	ND	ND	-	-	-
Δ9-THC	0.0282	0.00282	0.0288	5.10	10.20	5	2.02	Pass
Δ9-THCA	ND	ND	ND	ND	ND	-	-	-
THCV	ND	ND	ND	ND	ND	-	-	-
THCVA	ND	ND	ND	ND	ND	-	-	-
CBD	ND	ND	ND	ND	ND	-	-	-
CBDA	ND	ND	ND	ND	ND	-	-	-
CBC	ND	ND	ND	ND	ND	-	-	-
CBCA	ND	ND	ND	ND	ND	-	-	-
CBDV	ND	ND	ND	ND	ND	-	-	-
CBG	0.0284	0.00284	0.0290	5.14	10.27	5	2.75	-
CBGA	ND	ND	ND	ND	ND	-	-	-
CBN	ND	ND	ND	ND	ND	-	-	-
Total THC	0.0282	0.00282	0.0288	5.10	10.20	-	-	-
Total CBD	ND	ND	ND	ND	ND	-	-	-
Total Cannabinoids	0.0566	0.00566	0.0578	10.24	20.48	-	-	-
Sum of Cannabinoids	0.0566	0.00566	0.0578	10.24	20.48	-	-	-
Serving Weight (g)	180.8940							
Package Weight (g)	361.788							
g/ml Conversion Factor	1.0220							

Total THC =  $\Delta$ 8-THC +  $\Delta$ 9-THC + (0.877 \* THCA) Total CBD = CBD + (0.877 \* CBDA) Total Cannabinoids =  $\Sigma$  (neutral cannabinoids) + [0.877 \*  $\Sigma$  (acidic cannabinoids)]

### Microbiological Screen **O** Pass

Analyte	Method	Findings	Status
Salmonella	MF-MICRO-11	Not Detected	Pass
STEC	MF-MICRO-18	Not Detected	Pass

## Pesticide Residue Screen 📀 Pass

#### Method: MF-CHEM-13

Instrument: Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) & Gas Chromatography Tandem Mass Spectrometry (GC-MS/MS)

Analyte	LOD/LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Abamectin	0.04/0.10	ND	0.3	Pass
Acephate	0.02/0.06	ND	5.0	Pass

Anresco Laboratories www.anresco.com

1375 Van Dyke Ave, San Francisco, CA 94124

Sample #: 1242041 Lot #: WSTGH-101 Best By: 09/03/25 Page **1** of **4** Report ID: S-2

09/06/2024

09/06/2024

09/06/2024

% Difference (mg/

This document is intended only for the use of the party to whom it is addressed and may contain information that is privileged, confidential or protected from disclosure under applicable law. If you have received this document in error, please immediately notify us and return it to the address listed above.



# **Certificate of Analysis**

Analyte	LOD/LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Acequinocyl	0.04/0.10	ND	4.0	Pass
Acetamiprid	0.017/0.05	ND	5.0	Pass
Aldicarb	0.02/0.06	ND	0.02	Pass
Azoxystrobin	0.02/0.06	ND	40.0	Pass
Bifenazate	0.02/0.06	ND	5.0	Pass
Bifenthrin	0.04/0.10	ND	0.5	Pass
Boscalid	0.02/0.06	ND	10.0	Pass
Captan	0.2/0.6	ND	5.0	Pass
Carbaryl	0.02/0.06	ND	0.5	Pass
Carbofuran	0.017/0.05	ND	0.017	Pass
Chlorantraniliprole	0.02/0.06	ND	40.0	Pass
Chlordane	0.02/0.06	ND	0.02	Pass
Chlorfenapyr	0.02/0.06	ND	0.02	Pass
Chlorpyrifos	0.02/0.06	ND	0.02	Pass
Clofentezine	0.02/0.06	ND	0.5	Pass
Coumaphos	0.02/0.06	ND	0.02	Pass
Cyfluthrin	0.10/0.30	ND	1.0	Pass
Cypermethrin	0.10/0.30	ND	1.0	Pass
Daminozide	0.017/0.05	ND	0.017	Pass
DDVP (Dichlorvos)	0.013/0.04	ND	0.017	Pass
Diazinon	0.013/0.04	ND	0.013	
			0.2	Pass
Dimethoate	0.017/0.05	ND	20.0	Pass
Dimethomorph		ND		Pass
Ethoprop(hos)	0.02/0.06	ND	0.02	Pass
Etofenprox	0.02/0.06	ND	0.02	Pass
Etoxazole	0.02/0.06	ND	1.5	Pass
Fenhexamid	0.017/0.05	ND	10.0	Pass
Fenoxycarb	0.02/0.06	ND	0.02	Pass
Fenpyroximate	0.02/0.06	ND	2.0	Pass
Fipronil	0.02/0.06	ND	0.02	Pass
Flonicamid	0.02/0.06	ND	2.0	Pass
Fludioxonil	0.02/0.06	ND	30.0	Pass
Hexythiazox	0.02/0.06	ND	2.0	Pass
Imazalil	0.02/0.06	ND	0.02	Pass
Imidacloprid	0.02/0.06	ND	3.0	Pass
Kresoxim Methyl	0.02/0.06	ND	1.0	Pass
Malathion	0.017/0.05	ND	5.0	Pass
Metalaxyl	0.017/0.05	ND	15.0	Pass
Methiocarb	0.02/0.06	ND	0.02	Pass
Methomyl	0.013/0.04	ND	0.1	Pass
Methyl parathion	0.02/0.06	ND	0.02	Pass
Mevinphos	0.02/0.06	ND	0.02	Pass
Myclobutanil	0.02/0.06	ND	9.0	Pass
Naled	0.017/0.05	ND	0.5	Pass
Oxamyl	0.013/0.04	ND	0.2	Pass
Paclobutrazol	0.02/0.06	ND	0.02	Pass
Pentachloronitrobenzene	0.017/0.05	ND	0.2	Pass
Permethrins	0.10/0.30	ND	20.0	Pass
Phosmet	0.02/0.06	ND	0.2	Pass
Piperonyl Butoxide	0.02/0.06	ND	8.0	Pass
Prallethrin	0.04/0.10	ND	0.4	Pass
Propiconazole	0.02/0.06	ND	20.0	Pass
Propoxur	0.013/0.04	ND	0.013	Pass
Pyrethrins	0.15/0.50	ND	1.0	Pass
Pyridaben	0.017/0.05	ND	3.0	Pass
Spinetoram	0.02/0.06	ND	3.0	Pass
Spinosad	0.02/0.06	ND	3.0	Pass
Spiromesifen	0.02/0.00	ND	12.0	Pass
Spirotetramat	0.02/0.06	ND	13.0	Pass
Spiroxamine	0.017/0.05	ND	0.017	Pass
•		ND	2.0	
Tebuconazole	0.02/0.06	ND ND	0.013	Pass Pass
			0013	Pacc
Thiacloprid Thiamethoxam	0.02/0.06	ND	4.5	Pass

Page **2** of **4** Report ID: S-2

This document is intended only for the use of the party to whom it is addressed and may contain information that is privileged, confidential or protected from disclosure under applicable law. If you have received this document in error, please immediately notify us and return it to the address listed above.



## **Residual Solvent Screen O** Pass

Method: MF-CHEM-32

**Instrument:** Gas Chromatography Mass Spectrometry (GC/MS)

09/06/2024

Analyte	LOD/LOQ (ppm)	Findings (ppm)	Limit (ppm)	Status
1,2-Dichloroethane	0.5/0.5	ND	1	Pass
Acetone	57/200	ND	5000	Pass
Acetonitrile	56/200	ND	410	Pass
Benzene	0.5/0.5	ND	1	Pass
n-Butane	45/200	ND	5000	Pass
Chloroform	0.5/0.5	ND	1	Pass
Ethanol	37/200	1340.00	5000	Pass
Ethylacetate	38/200	ND	5000	Pass
Ethyl ether	37/200	ND	5000	Pass
Ethylene oxide	0.1/0.5	ND	1	Pass
n-Heptane	135/200	ND	5000	Pass
n-Hexane	49/200	ND	290	Pass
Isopropyl alcohol	57/200	ND	5000	Pass
Methanol	37/200	ND	3000	Pass
Methylene chloride	0.1/0.5	ND	1	Pass
n-Pentane	37/200	ND	5000	Pass
Propane	72/200	ND	5000	Pass
Toluene	49/200	ND	890	Pass
Total xylenes (ortho-, meta-, para-)	58/200	ND	2170	Pass
Trichloroethylene	0.5/0.5	ND	1	Pass

### Heavy Metal Screen **O** Pass

Method: MF-CHEM-16

Instrument: Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

Analyte	LOD/LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Arsenic	0.02/0.05	ND	1.5	Pass
Cadmium	0.02/0.05	ND	0.5	Pass
Mercury	0.02/0.05	ND	3	Pass
Lead	0.02/0.125	ND	0.5	Pass

### Foreign Material 🔮 Pass

Method: MF-CHEM-7

Analyte	Findings	Limit	Status
Sand, Soils, Cinders, and Dirt	ND	25%	Pass
Mold	ND	25%	Pass
Imbedded Foreign Material	ND	25%	Pass
Insect Fragment	ND	1 per 3g	Pass
Hair	ND	1 per 3g	Pass
Mammalian Excreta	ND	1 per 3g	Pass

## Mycotoxin Screen SPass

Method: MF-CHEM-13

Instrument: Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) & Gas Chromatography Tandem Mass Spectrometry (GC-MS/MS)

Analyte	LOD/LOQ (µg/kg)	Findings (µg/kg)	Limit (µg/kg)	Status
Aflatoxin B1	2/5	ND	-	-
Aflatoxin B2	2/5	ND	-	-
Aflatoxin G1	2/5	ND	-	-
Aflatoxin G2	2/5	ND	-	-
Total Aflatoxins	8/20	ND	20	Pass
Ochratoxin A	6/18	ND	20	Pass

Anresco Laboratories www.anresco.com 1375 Van Dyke Ave, San Francisco, CA 94124 Page **3** of **4** Report ID: S-2

This document is intended only for the use of the party to whom it is addressed and may contain information that is privileged, confidential or protected from disclosure under applicable law. If you have received this document in error, please immediately notify us and return it to the address listed above.

09/06/2024

09/06/2024

09/06/2024



# **Certificate of Analysis**

ND = None Detected LOD = Limit of Detection LOQ = Limit of Quantitation



Scan to verify

Reported by



Lab Co Director

Anresco Laboratories www.anresco.com 1375 Van Dyke Ave, San Francisco, CA 94124 Sample #: 1242041 Lot #: WSTGH-101 Best By: 09/03/25 Page **4** of **4** Report ID: S-2

This document is intended only for the use of the party to whom it is addressed and may contain information that is privileged, confidential or protected from disclosure under applicable law. If you have received this document in error, please immediately notify us and return it to the address listed above.