

Universal Hemp Panel

**ANALYZED BY:**

Anresco Laboratories  
1375 Van Dyke Avenue,  
San Francisco, CA 94124  
DEA# PA0202945

**CUSTOMER:**

Surly Brewing Company  
4811 Dusharme Dr  
Brooklyn Center, MN 55429



**SAMPLE INFORMATION**

**Sample No.:** 1398636  
**Product Name:** Surly Brewing Take Five Lime  
**Matrix:** Edible (Carbonated Beverage)  
**Lot #:** T085 EXP 27090

**Date Collected:** 04/03/2026  
**Date Received:** 04/03/2026  
**Date Reported:** 04/15/2026

**TEST SUMMARY**

**Cannabinoid Profile:** ✔ Tested  
**Pesticide Residue Screen:** ✔ Pass  
**Heavy Metal Screen:** ✔ Pass  
**Mycotoxin Screen:** ✔ Pass  
**Microbiological Screen:** ✔ Pass  
**Residual Solvent Screen:** ✔ Pass  
**Foreign Material:** ✔ Pass

**Customer Comment(s):**

The batch was processed in a facility that holds a current and valid permit issued by a human health or food safety regulatory entity with authority over the facility, and that facility meets the human health or food safety sanitization requirements of the regulatory entity.

**Cannabinoid Profile** ✔ Tested

04/07/2026

**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  
**Measurement of Uncertainty Average:** ±6.3%

Cannabinoid	mg/g	%	mg/ml	mg/serving	mg/package	Labeled mg/serving	% Difference
Δ8-THC	ND	ND	ND	ND	ND	-	-
Δ9-THC	0.0139	0.00139	0.0139	4.93	4.93	5	1.41
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	ND	ND	ND	ND	ND	-	-
CBGA	ND	ND	ND	ND	ND	-	-
CBN	ND	ND	ND	ND	ND	-	-
Exo-THC	ND	ND	ND	ND	ND	-	-
(6aR,9R)-Δ10-THC	ND	ND	ND	ND	ND	-	-
(6aR,9S)-Δ10-THC	ND	ND	ND	ND	ND	-	-
9(R)-Hexahydrocannabinol	ND	ND	ND	ND	ND	-	-
9(S)-Hexahydrocannabinol	ND	ND	ND	ND	ND	-	-
Δ8-THC-O-Acetate	ND	ND	ND	ND	ND	-	-
Δ9-THC-O-Acetate	ND	ND	ND	ND	ND	-	-
THC-O-Phosphate	NT	NT	NT	NT	NT	-	-
δ8-THCP	ND	ND	ND	ND	ND	-	-
δ9-THCP	ND	ND	ND	ND	ND	-	-
Total THC	0.0139	0.00139	0.0139	4.93	4.93	-	-
Total CBD	ND	ND	ND	ND	ND	-	-
Total Cannabinoids	0.0139	0.00139	0.0139	4.93	4.93	-	-
Sum of Cannabinoids	0.0139	0.00139	0.0139	4.93	4.93	-	-
<b>Serving Weight (g)</b>	354.6450						
<b>Package Weight (g)</b>	354.645						
<b>g/ml Conversion Factor</b>	0.9990						

Total THC = Δ9-THC + (0.877 \* THCA)  
Total CBD = CBD + (0.877 \* CBDA)  
Total Cannabinoids = Σ (neutral cannabinoids) + [0.877 \* Σ (acidic cannabinoids)]

## Microbiological Screen ✔ Pass

04/09/2026

Measurement of Uncertainty Average: APC ±35.6%, Y&M ±31.3%

Analyte	Findings	Units	Method	Limit	Status
Salmonella	ND	/25g	AOAC 2016.01	ND	Pass
STEC	ND	/25g	MF-MICRO-18	ND	Pass
Aspergillus flavus	ND	/25g	MF-MICRO-14	ND	Pass
Aspergillus fumigatus	ND	/25g	MF-MICRO-14	ND	Pass
Aspergillus niger	ND	/25g	MF-MICRO-14	ND	Pass
Aspergillus terreus	ND	/25g	MF-MICRO-14	ND	Pass
Listeria Species	ND	/25g	AOAC 2016.07	ND	Pass
Total Aerobic Plate Count	0/10	cfu/g	FDA BAM	100000	Pass
Total Coliforms	0/10	cfu/g	FDA BAM - ECC Agar	100	Pass
E. Coli	ND	/1g	FDA BAM Modified	1	Pass
Total Enterobacteriaceae	<1	cfu/g	AOAC 2003.01	ND	Pass
Staphylococcus aureus	<1	cfu/g	AOAC 2003.07	ND	Pass
Total Yeast and Mold	<1	cfu/g	AOAC 2014.05	100000	Pass

## Pesticide Residue Screen ✔ Pass

04/09/2026

Method: MF-CHEM-13

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

Measurement of Uncertainty Average: ±21.40%

Analyte	LOD/LOQ (ppm)	Findings (ppm)	Limit (ppm)	Status
Abamectin	0.015/0.05	ND	0.05	Pass
Acephate	0.003/0.01	ND	0.01	Pass
Acequinocyl	0.003/0.01	ND	0.01	Pass
Acetamiprid	0.003/0.01	ND	0.01	Pass
Aldicarb	0.003/0.01	ND	0.01	Pass
Azoxystrobin	0.003/0.01	ND	0.01	Pass
Bifenazate	0.003/0.01	ND	0.01	Pass
Bifenthrin	0.003/0.01	ND	0.01	Pass
Boscalid	0.003/0.01	ND	0.01	Pass
Captan	0.250/0.7	ND	0.7	Pass
Carbaryl	0.003/0.01	ND	0.01	Pass
Carbofuran	0.003/0.01	ND	0.01	Pass
Chlorantraniliprole	0.003/0.01	ND	0.01	Pass
Chlordane	0.020/0.06	ND	0.06	Pass
Chlorfenapyr	0.015/0.05	ND	0.05	Pass
Chlorpyrifos	0.003/0.01	ND	0.01	Pass
Clofentezine	0.003/0.01	ND	0.01	Pass
Coumaphos	0.003/0.01	ND	0.01	Pass
Cyfluthrin	0.015/0.05	ND	0.05	Pass
Cypermethrin	0.015/0.05	ND	0.05	Pass
Daminozide	0.003/0.01	ND	0.01	Pass
DDVP (Dichlorvos)	0.003/0.01	ND	0.01	Pass
Diazinon	0.003/0.01	ND	0.01	Pass
Dimethoate	0.003/0.01	ND	0.01	Pass
Dimethomorph	0.003/0.01	ND	0.01	Pass
Ethoprop(hos)	0.003/0.01	ND	0.01	Pass
Etofenprox	0.003/0.01	ND	0.01	Pass
Etoxazole	0.003/0.01	ND	0.01	Pass
Fenhexamid	0.007/0.02	ND	0.02	Pass
Fenoxycarb	0.003/0.01	ND	0.01	Pass
Fenpyroximate	0.007/0.02	ND	0.02	Pass
Fipronil	0.003/0.01	ND	0.01	Pass
Flonicamid	0.003/0.01	ND	0.01	Pass
Fludioxonil	0.003/0.01	ND	0.01	Pass
Hexythiazox	0.003/0.01	ND	0.01	Pass
Imazalil	0.003/0.01	ND	0.01	Pass
Imidacloprid	0.003/0.01	ND	0.01	Pass
Kresoxim Methyl	0.003/0.01	ND	0.01	Pass
Malathion	0.003/0.01	ND	0.01	Pass
Metalaxyl	0.003/0.01	ND	0.01	Pass

Analyte	LOD/LOQ (ppm)	Findings (ppm)	Limit (ppm)	Status
Methiocarb	0.003/0.01	ND	0.01	Pass
Methomyl	0.003/0.01	ND	0.01	Pass
Methyl parathion	0.003/0.01	ND	0.01	Pass
Mevinphos	0.007/0.02	ND	0.02	Pass
Myclobutanil	0.003/0.01	ND	0.01	Pass
Naled	0.003/0.01	ND	0.01	Pass
Oxamyl	0.003/0.01	ND	0.01	Pass
Pacllobutrazol	0.003/0.01	ND	0.01	Pass
Pentachloronitrobenzene	0.003/0.01	ND	0.01	Pass
Permethrins	0.015/0.05	ND	0.05	Pass
Phosmet	0.003/0.01	ND	0.01	Pass
Piperonyl Butoxide	0.003/0.01	ND	0.01	Pass
Prallethrin	0.015/0.05	ND	0.05	Pass
Propiconazole	0.003/0.01	ND	0.01	Pass
Propoxur	0.003/0.01	ND	0.01	Pass
Pyrethrins	0.015/0.05	ND	0.05	Pass
Pyridaben	0.003/0.01	ND	0.01	Pass
Spinetoram	0.003/0.01	ND	0.01	Pass
Spinosad	0.003/0.01	ND	0.01	Pass
Spiromesifen	0.003/0.01	ND	0.01	Pass
Spirotetramat	0.003/0.01	ND	0.01	Pass
Spiroxamine	0.003/0.01	ND	0.01	Pass
Tebuconazole	0.003/0.01	ND	0.01	Pass
Thiacloprid	0.003/0.01	ND	0.01	Pass
Thiamethoxam	0.003/0.01	ND	0.01	Pass
Trifloxystrobin	0.003/0.01	ND	0.01	Pass
Azadirachtin	0.100/0.30	ND	0.3	Pass
Chlormequat Chloride	0.03/0.10	ND	0.1	Pass
MGK 264	0.03/0.10	ND	0.1	Pass

**Residual Solvent Screen** ✔ Pass

04/10/2026

Method: MF-CHEM-32

Measurement of Uncertainty Average: ±1.43%

Analyte	LOD/LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Propane	67/200	ND	210	Pass
(+/-)-2-Butanol	13.3/40	ND	5000	Pass
1,1-Dichloroethene	2/4	ND	8	Pass
1,2-Dichloroethane	0.2/0.5	ND	5	Pass
1,4-Dioxane	13.3/40	ND	30	Pass
2-Ethoxyethanol	13.3/40	ND	160	Pass
Acetone	67/200	ND	500	Pass
Acetonitrile	67/200	ND	410	Pass
Benzene	0.2/0.5	ND	1	Pass
Chloroform	0.2/0.5	ND	2	Pass
Cumene	13.3/40	ND	70	Pass
Cyclohexane	13.3/40	ND	3880	Pass
Ethanol	67/200	1060.00	5000	Pass
Ethyl acetate	67/200	ND	1000	Pass
Ethyl ether	67/200	ND	5000	Pass
Ethylene Glycol	13.3/40	ND	620	Pass
Ethylene oxide	0.2/0.5	ND	5	Pass
n-Heptane	67/200	ND	500	Pass
Isopropyl Acetate	13.3/40	ND	5000	Pass
Isopropyl alcohol	67/200	ND	500	Pass
Methanol	67/200	ND	500	Pass
Methylene chloride	0.2/0.5	ND	600	Pass
Toluene	67/200	ND	53	Pass
Tetrahydrofuran	13.3/40	ND	720	Pass
Trichloroethene	13.3/40	ND	80	Pass
Isobutane	6.7/20	ND	-	See Total Butanes
n-Butane	67/200	ND	-	See Total Butanes
Total Butanes	6.7/40	ND	500	Pass
2,2-Dimethylbutane	2.7/8	ND	-	See Total Hexanes
2,3-Dimethylbutane	2.7/8	ND	-	See Total Hexanes
2-Methylpentane	2.7/8	ND	-	Pass
3-Methylpentane	2.7/8	ND	-	Pass
n-Hexane	67/200	ND	-	See Total Hexanes
Total Hexanes	2.7/8	ND	18	Pass
2 Methylbutane	4.4/13.34	ND	-	See Total Pentanes
Neopentane	4.4/13.34	ND	-	See Total Pentanes
n-Pentane	67/200	ND	-	See Total Pentanes
Total Pentanes	4.4/13.34	ND	500	Pass
Ethylbenzene	3.3/10	ND	-	See Total Xylenes
m+p-Xylene	6.7/20	ND	-	See Total Xylenes
o-Xylene	3.3/10	ND	-	See Total Xylenes
Total Xylenes	67/200	ND	217	Pass

Comment(s): Ethanol failure confirmed with dilution.

**Heavy Metal Screen** ✔ Pass

04/09/2026

Method: MF-CHEM-16

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

Measurement of Uncertainty Average: ±4.4%

Analyte	LOD / LOQ (µg/g)	Findings (µg/g)	Limit	Status
Arsenic	0.033/0.101	ND	0.2	Pass
Cadmium	0.047/0.141	ND	0.2	Pass
Mercury	0.014/0.05	ND	0.1	Pass
Lead	0.107/0.324	ND	0.5	Pass

**Foreign Material** ✔ Pass

04/09/2026

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** ✔ Pass

04/09/2026

Method: MF-CHEM-13

Instrument:

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

Measurement of Uncertainty (MU):

±20.21%

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

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

Reported by



Eric Tam  
Senior Chemist



Scan to verify