

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.: 1398637
Product Name: Willie's Black Cherry Lime
Matrix: Edible (Carbonated Beverage)
Lot #: WSCL007 BB/EXP 04/02/27

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

TEST SUMMARY

Cannabinoid Profile: ✔ Tested
Microbiological Screen: ✔ Pass
Residual Solvent Screen: ✔ Pass
Foreign Material: ✔ Pass

Terpenoid Profile: ✔ Tested
Pesticide Residue Screen: ✔ Pass
Heavy Metal Screen: ✔ Pass
Mycotoxin Screen: ✔ Pass

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 | 0.0146 | 0.00146 | 0.0147 | 5.22 | 5.22 | 5 | 4.44 |
| Δ9-THCA | ND | ND | ND | ND | ND | - | - |
| THCV | ND | ND | ND | ND | ND | - | - |
| THCVA | ND | ND | ND | ND | ND | - | - |
| CBD | 0.0142 | 0.00142 | 0.0143 | 5.08 | 5.08 | 5 | 1.58 |
| 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 | 0.0146 | 0.00146 | 0.0147 | 5.22 | 5.22 | 5 | 4.44 |
| 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 | 0.0146 | 0.00146 | 0.0147 | 5.22 | 5.22 | - | - |
| Total CBD | 0.0142 | 0.00142 | 0.0143 | 5.08 | 5.08 | - | - |
| Total Cannabinoids | 0.0434 | 0.00434 | 0.0437 | 15.52 | 15.52 | - | - |
| Sum of Cannabinoids | 0.0434 | 0.00434 | 0.0437 | 15.52 | 15.52 | - | - |
| Serving Weight (g) | 357.6625 | | | | | | |
| Package Weight (g) | 357.6625 | | | | | | |
| g/ml Conversion Factor | 1.0075 | | | | | | |

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

Terpenoid Profile

04/09/2026

Method: MF-CHEM-17

Instrument: Gas Chromatography Mass Spectrometry (GC/MS)

| Terpene | LOD/LOQ (mg/g) | mg/g | % |
|-----------------------|----------------|------|----|
| α-Pinene | 0.009/0.025 | ND | ND |
| Camphene | 0.009/0.025 | ND | ND |
| β-Myrcene | 0.009/0.025 | ND | ND |
| β-Pinene | 0.009/0.025 | ND | ND |
| δ-3-Carene | 0.009/0.025 | ND | ND |
| Limonene | 0.009/0.025 | ND | ND |
| α-Terpinene | 0.009/0.025 | ND | ND |
| trans-beta-Ocimene | 0.006/0.01725 | ND | ND |
| cis-beta-Ocimene | 0.003/0.00775 | ND | ND |
| p-Cymene | 0.009/0.025 | ND | ND |
| Eucalyptol | 0.009/0.025 | ND | ND |
| γ-Terpinene | 0.009/0.025 | ND | ND |
| Terpinolene | 0.009/0.025 | ND | ND |
| Linalool | 0.009/0.025 | ND | ND |
| Isopulegol | 0.009/0.025 | ND | ND |
| Menthol | 0.009/0.025 | ND | ND |
| (-)-Borneol | 0.009/0.025 | ND | ND |
| Terpineol | 0.009/0.025 | ND | ND |
| Citronellol | 0.009/0.025 | ND | ND |
| Geraniol | 0.009/0.025 | ND | ND |
| β-Caryophyllene | 0.009/0.025 | ND | ND |
| α-Humulene | 0.009/0.025 | ND | ND |
| cis-Nerolidol | 0.004/0.01025 | ND | ND |
| trans-Nerolidol | 0.005/0.01475 | ND | ND |
| Guaïol | 0.009/0.025 | ND | ND |
| Caryophyllene Oxide | 0.009/0.025 | ND | ND |
| α-Bisabolol | 0.009/0.025 | ND | ND |
| Total Terpenes | - | ND | ND |

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 |

| Analyte | LOD/LOQ (ppm) | Findings (ppm) | Limit (ppm) | Status |
|-------------------------|---------------|----------------|-------------|--------|
| 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 |
| 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 |
| Paclobutrazol | 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 | 1030.00 | 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



Vu Lam
Lab Co Director



Scan to verify