

## CERTIFICATE OF ANALYSIS

**Project:** Industrial Hemp

**Customer ID:** 73849209

**Harvest/Extract Lot:** -

**Order ID:** 2018000292

**Customer Name:** Swanson

**Harvest/Extract Date:** -

**Cultivar (Strain):** CB Dawg

**Lab ID:** 2018000553

**Sample Matrix:** Plant (Flower)

**Sample Date:** 09/19/2018

**Date Received:** 09/20/2018

**Date Completed:** 09/24/2018

**Remarks:**

**Analysis Date/Time:** 09-23-2018 2138

**Method:** HPLC/UV

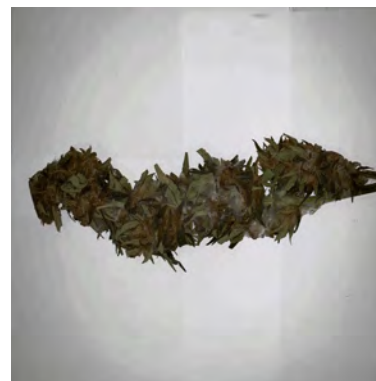
**Moisture Content (%):** 61.30

**Analyst:**

**Instrument:** Agilent 1100

**Water Activity (aw):** - at - °C

<u>Cannabinoid</u>	<u>Result</u> <u>(%)</u>	<u>Result</u> <u>(mg/g)</u>	<u>Reporting Limit</u> <u>(mg/g)</u>
CBD	1.00	10.0	0.05
CBDa	0.368	3.68	0.05
CBDv	0.0629	0.629	0.05
Δ9-THC	0.142	1.42	0.05
Δ8-THC	<RL	<RL	0.05
THCa	<RL	<RL	0.05
CBC	0.0556	0.556	0.05
CBG	0.0352	0.352	0.05
CBGa	<RL	<RL	0.05
CBN	<RL	<RL	0.05
<b>TOTAL</b>	1.66	16.6	



**TOTAL THC** 0.142 1.42  
**TOTAL CBD** 1.32 13.2

Deviations from standard operating procedure: None

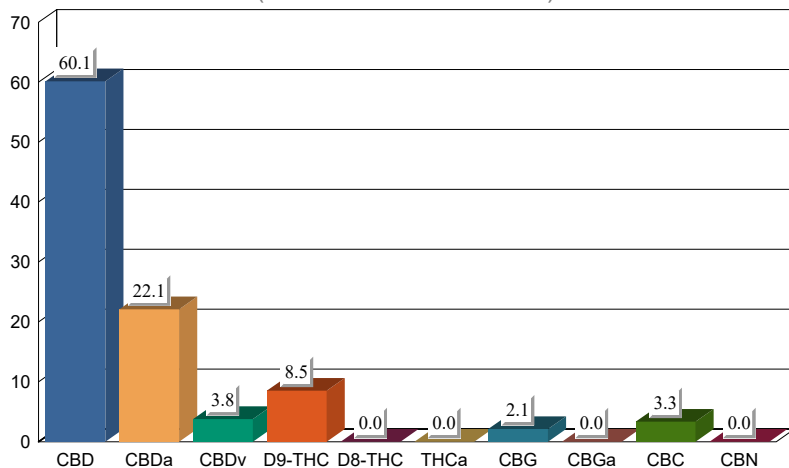
Recoveries for all analyte standards: 90-110%

Replicate Uncertainties: <5% RSD, <20% RPD

Sample/Reagent Blanks: <RL for all analytes

### Cannabinoid Distribution

(% of Total Cannabinoids)



Values for plant matter are adjusted for moisture content.

Total THC = (THCa x 0.877) + Δ9-THC

Total CBD = (CBDa x 0.877) + CBD

Percentage results are reported by mass.

mg/g results are reported as mass component per mass material.

Abbreviations: UV - Ultraviolet, HPLC - High Pressure Liquid Chromatography, RL - Reporting Limit, RPD - Relative Percent Difference, RSD - Relative Standard Deviation

This information is provided as a service and makes no claims of efficacy and/or safety of this product.

Results are applicable only for the sample(s) analyzed and for the specific analysis conducted.

This report is for informational purposes only and should not be used to diagnose, treat, or prevent any medical-related symptoms.

The statements and results herein have not been approved and/or endorsed by the FDA.

### REPORT OF LABORATORY ANALYSIS

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Felling Analytical Services and Technology (F.A.S.T.), LLC

*Kyle W. Felling*  
Kyle W. Felling, Ph.D.  
Laboratory Director

## CERTIFICATE OF ANALYSIS

**Project:** Industrial Hemp

**Order ID:** 2018000292

**Customer ID:** 73849209

**Customer Name:** Swanson

**Harvest/Extract Lot:** -

**Harvest/Extract Date:** -

**Cultivar (Strain):** Frosted Lime

**Sample Date:** 09/19/2018

**Lab ID:** 2018000554

**Date Received:** 09/20/2018

**Sample Matrix:** Plant (Flower)

**Date Completed:** 09/24/2018

**Remarks:**

**Analysis Date/Time:** 09-23-2018 2202

**Analyst:**

**Method:** HPLC/UV

**Instrument:** Agilent 1100

**Moisture Content (%):** 57.60

**Water Activity (aw):** - at - °C

<u>Cannabinoid</u>	<u>Result</u> <u>(%)</u>	<u>Result</u> <u>(mg/g)</u>	<u>Reporting Limit</u> <u>(mg/g)</u>
CBD	1.06	10.6	0.05
CBDa	0.302	3.02	0.05
CBDv	0.0221	0.221	0.05
Δ9-THC	0.126	1.26	0.05
Δ8-THC	<RL	<RL	0.05
THCa	<RL	<RL	0.05
CBC	0.0359	0.359	0.05
CBG	<RL	<RL	0.05
CBGa	<RL	<RL	0.05
CBN	<RL	<RL	0.05
<b>TOTAL</b>	1.55	15.5	



**TOTAL THC** 0.126 1.26  
**TOTAL CBD** 1.33 13.3

Deviations from standard operating procedure: None

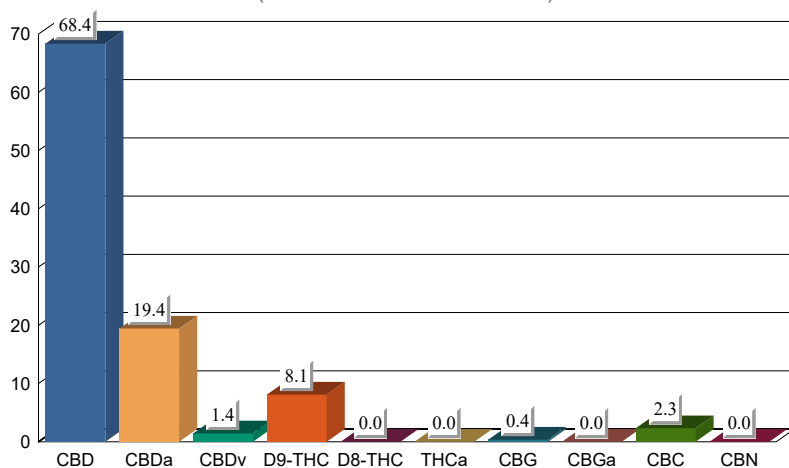
Recoveries for all analyte standards: 90-110%

Replicate Uncertainties: <5% RSD, <20% RPD

Sample/Reagent Blanks: <RL for all analytes

### Cannabinoid Distribution

(% of Total Cannabinoids)



Values for plant matter are adjusted for moisture content.

Total THC = (THCa x 0.877) + Δ9-THC

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