

**CERTIFICATE OF ANALYSIS**

**Project:** Industrial Hemp  
**Order ID:** 2019000019

**Customer ID:** 65928260  
**Customer Name:** Hempyre Genetics

**Harvest/Extract Lot:** 010119  
**Harvest/Extract Date:** 01/01/2019

**Cultivar (Strain):** Special Sauce  
**Sample Date:** 01/02/2019

**Lab ID:** 2019000066  
**Date Received:** 01/02/2019

**Sample Matrix:** Hemp  
**Date Completed:** 01/07/2019

**Remarks:**

**Analysis Date/Time:** 01-03-2019 2259  
**Analyst:** KWF

**Method:** HPLC/UV  
**Instrument:** Agilent 1100

**Moisture Content (%):** -  
**Water Activity (aw):** - at - °C

<u>Cannabinoid</u>	<u>Result (%)</u>	<u>Result (mg/g)</u>	<u>Reporting Limit (mg/g)</u>	<u>Per Unit (mg)</u>
CBD	1.27	12.7	0.050	12.7
CBDa	15.0	150	0.050	150
CBDv	<RL	<RL	0.050	-
Δ9-THC	0.126	1.26	0.050	1.26
Δ8-THC	<RL	<RL	0.050	-
THCa	0.698	6.98	0.050	6.98
CBC	0.103	1.03	0.050	1.03
CBG	0.0602	0.602	0.050	0.600
CBGa	0.478	4.78	0.050	4.78
CBN	<RL	<RL	0.050	-
<b>TOTAL</b>	<b>17.8</b>	<b>178</b>		<b>178</b>
<b>TOTAL THC</b>	<b>0.738</b>	<b>7.38</b>		<b>7.38</b>
<b>TOTAL CBD</b>	<b>14.5</b>	<b>145</b>		<b>145</b>



**UNIT MASS (g): 1.00**

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

Values for plant matter are adjusted for moisture content.

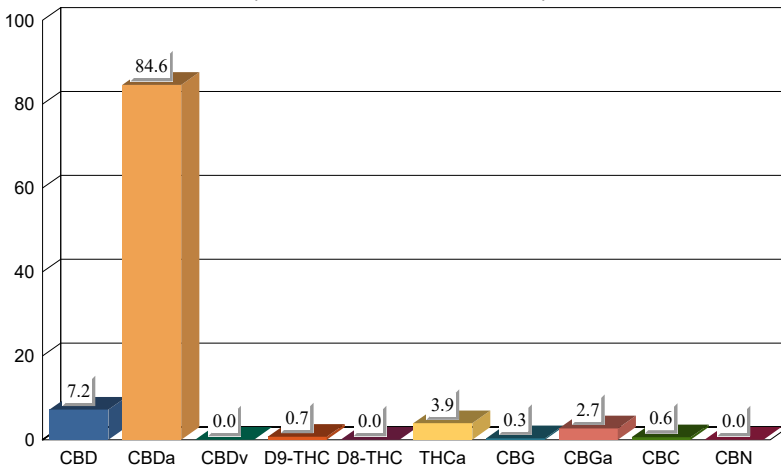
Total THC = (THCa x 0.877) + Δ9-THC  
Total CBD = (CBDa x 0.877) + CBD

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

**Cannabinoid Distribution**

(% of Total Cannabinoids)



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

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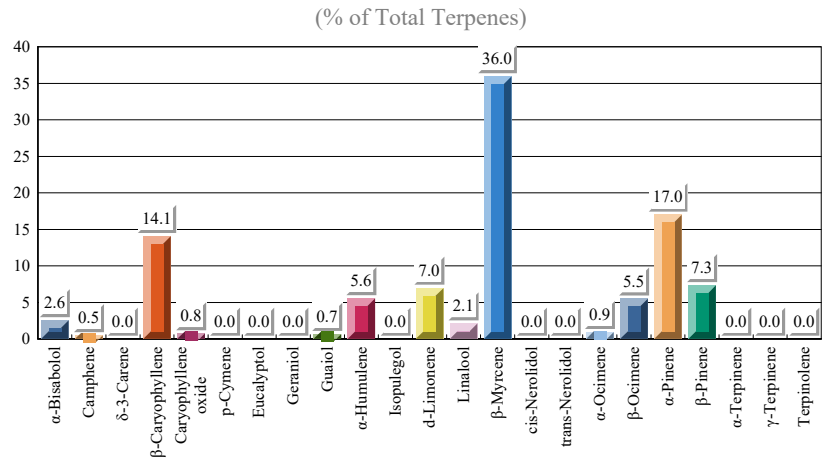
**TERPENOID PROFILE**

**Analysis Date/Time:** 01-05-2019 1131      **Method:** HS/GC/MS (Internal Method-002)      **Deviations from SOP:**  
**Analyst:** KWF      **Instrument:** Agilent 7890/5975      None

<u>Terpene</u>	<u>Result</u> ( <u>µg/g</u> )	<u>Result</u> ( <u>% Total Terpenes</u> )
α-Bisabolol	293	2.56
Camphene	57.5	0.503
δ-3-Carene	-	-
β-Caryophyllene	1613	14.1
Caryophyllene oxide	87.3	0.763
p-Cymene	-	-
Eucalyptol	-	-
Geraniol	-	-
Guaiol	77.6	0.678
α-Humulene	638	5.57
Isopulegol	-	-
d-Limonene	799	6.98
Linalool	241	2.11
β-Myrcene	4116	36.0
cis-Nerolidol	-	-
trans-Nerolidol	-	-
α-Ocimene	108	0.941
β-Ocimene	630	5.50
α-Pinene	1948	17.0
β-Pinene	839	7.33
α-Terpinene	-	-
γ-Terpinene	-	-
Terpinolene	-	-
<b>TOTAL</b>	<b>11446</b>	<b>100</b>



**Terpenoid Distribution**



**Reporting Limit (µg/g) 7**

*Abbreviations:* HS - Headspace, GC - Gas Chromatography, MS - Mass Spectrometry, RL - Reporting Limit

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"-" not detected above reporting limit

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