

CERTIFICATE OF ANALYSIS

Product Name: Type 90 Hop Pellets

Lot Number: P91-ZKUWIL0212

Variety: Willamette

Crop Year: 2016

<u>Characteristic</u> <u>Typical Analysis</u> <u>Actual Analysis</u>

Alpha Acids: 2.5 - 17.5% (w/w) 4.9%

LCV by EBC Analytica V 7.5

Oil by Distillation: Varies by Variety 0.8%

ASBC Hops - 13 (%v/w)

Oil Profile by GC, EBC Analytica V 7.12: B-Pinene: 0.4 % Farnesene: 7.3%

Myrcene: 25.9 % Humulene: 35.2%

Linalool: 0.5 % Geraniol: 0.1%

Caryophyllene: 13.4 %