Alliance Analytical Laboratories, Inc.

179 West Randall Street Coopersville, MI 49404 Phone: (616) 837-7670 Fax: (616) 837-7701



TEST RESULTS REPORT

Test methods marked with ^ are accredited under the laboratory's ISO/IEC 17025 accreditation issued by ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation AT-2044

CUSTOMER Dickinson Research Extension Center

> 1041 State Ave. Dickinson, ND 58601 Phone: 701-290-3270

Email: jon.stika@ndsu.edu;

SAMPLE DESCRIPTION **Fuggle**

SD 08/25/18

SAMPLE DATE 8/25/2018

DATE RECEIVED 8/30/2018

Customer PO REFERENCE NUMBER 180347: 1834722

TEMPERATURE AT RECEIVING



9/5/2018

Date:

Test Requested	Test Method	Results	Ref Number	Start Date
HOPS:Brewers' Quality	^ASBC Hops-14 Analyst: 23			9/4 9:56 AM
10% Moisture Adjusted Alpha Acids		2.66 %	CV19:72	9/4 9:56 AM
	Analyst: 23			
10% Moisture Adjusted Beta Acids		2.35 %	CV19:72	9/4 9:56 AM
	Analyst: 23			
Alpha Acid	^ASBC Hops-14	2.71 %	CV19:72	9/4 9:56 AM
	Analyst: 23			
Beta Acid	^ASBC Hops-14	2.39 %	CV19:72	9/4 9:56 AM
	Analyst: 23			
Cohumulone	^ASBC Hops-14	27.6% Relative To Alpha	CV19:72	9/4 9:56 AM
	Analyst: 23			
Colupulone	^ASBC Hops-14	45.5% Relative To Beta	CV19:72	9/4 9:56 AM
	Analyst: 23			
Hops Storage Index	ASBC Hops-12	0.25	BL08:66	9/5 12:00 PM
	Analyst: 24			
Moisture	ASBC Hops-4c	8.27 %	CV19:74	9/4 9:56 AM
	Analyst: 23			

It is the customer's responsibility to evaluate the compliance of these results to any regulatory requirement.

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Reviewed and Approved by:

Audrey Monroe - Laboratory Director

Date: 9/5/2018 Page 1 of 2

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Date:

SAMPLE DESCRIPTION Fuggle

SD 08/25/18

SAMPLE DATE 8/25/2018

DATE RECEIVED 8/30/2018

REFERENCE NUMBER 180347: 1834722 **Customer PO**

TEMPERATURE AT RECEIVING

Test Requested Test Method Results **Ref Number Start Date**

9/4 9:56 AM Xanthohumol 0.46 % CV19:72

Analyst: 23

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