



**Alliance Analytical Laboratories, Inc.**

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



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

**TEST RESULTS REPORT**

**CUSTOMER** Dickinson Research Extension Center  
1041 State Ave.  
Dickinson, ND 58601  
Phone: 701-290-3270  
Email: jon.stika@ndsu.edu;

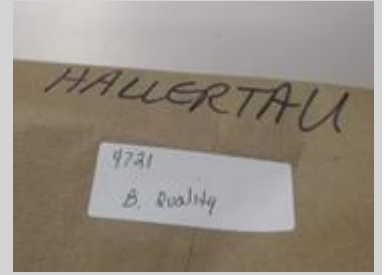
**SAMPLE DESCRIPTION** Hallertau  
SD 08/25/18

**SAMPLE DATE** 8/25/2018

**DATE RECEIVED** 8/30/2018

**REFERENCE NUMBER** 180347: 1834721 **Customer PO**

**TEMPERATURE AT RECEIVING**



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	Analyst: 23	3.76 %	CV19:72	9/4 9:56 AM
10% Moisture Adjusted Beta Acids	Analyst: 23	3.63 %	CV19:72	9/4 9:56 AM
Alpha Acid	^ASBC Hops-14 Analyst: 23	3.84 %	CV19:72	9/4 9:56 AM
Beta Acid	^ASBC Hops-14 Analyst: 23	3.71 %	CV19:72	9/4 9:56 AM
Cohumulone	^ASBC Hops-14 Analyst: 23	30.4% Relative To Alpha	CV19:72	9/4 9:56 AM
Colupulone	^ASBC Hops-14 Analyst: 23	53.1% Relative To Beta	CV19:72	9/4 9:56 AM
Hops Storage Index	ASBC Hops-12 Analyst: 24	0.23	BL08:66	9/5 12:00 PM
Moisture	ASBC Hops-4c Analyst: 23	8.00 %	CV19:74	9/4 9:56 AM

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

**THIS DOCUMENT CONTAINS TRADE SECRET/CONFIDENTIAL INFORMATION  
PURSUANT TO 5 U.S.C.(b)(4)**

**This report must not be reproduced, except in full, without written approval of the laboratory.**

Reviewed and Approved by:

Audrey Monroe - Laboratory Director

Date: 9/5/2018

Date: 9/5/2018



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<b>SAMPLE DATE</b>	8/25/2018	
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<b>REFERENCE NUMBER</b>	180347: 1834721	
<b>TEMPERATURE AT RECEIVING</b>		

Test Requested	Test Method	Results	Ref Number	Start Date
Xanthohumol	Analyst: 23	0.63 %	CV19:72	9/4 9:56 AM

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