

# TRUE PELLET™

CITRUS



LOT ID 39BNS51334  
ANALYSIS OVERVIEW:  
FRESH, LIGHT, NOBLE  
CHARACTERISTICS

True Pellet™ Analysis for Amarillo® Lot  
19AMT90213  
21-05-18

## Certificate of Analysis

CoA ID	Date of Issue	Test Date
VG121029210518	05/18/2021	04/27/2021

Lot Number	Variety	Moisture* %	Total Oil
19AMT90213	Amarillo® (VGXP01)	5.8	NT
Alpha* %	Beta* %	Cohumulone* %	Colupulone* %
6.1	5.1	20.7	38.3
Moisture Content Analysis (Modified ASBC Malt-3)			
HPLC (Modified EBC 7.8 for Alpha/Beta/Iso-Alpha %)			
Total Oil Analysis (ASBC Hops-13 and ASBC Hops-17)			

Released by: \_\_\_\_\_

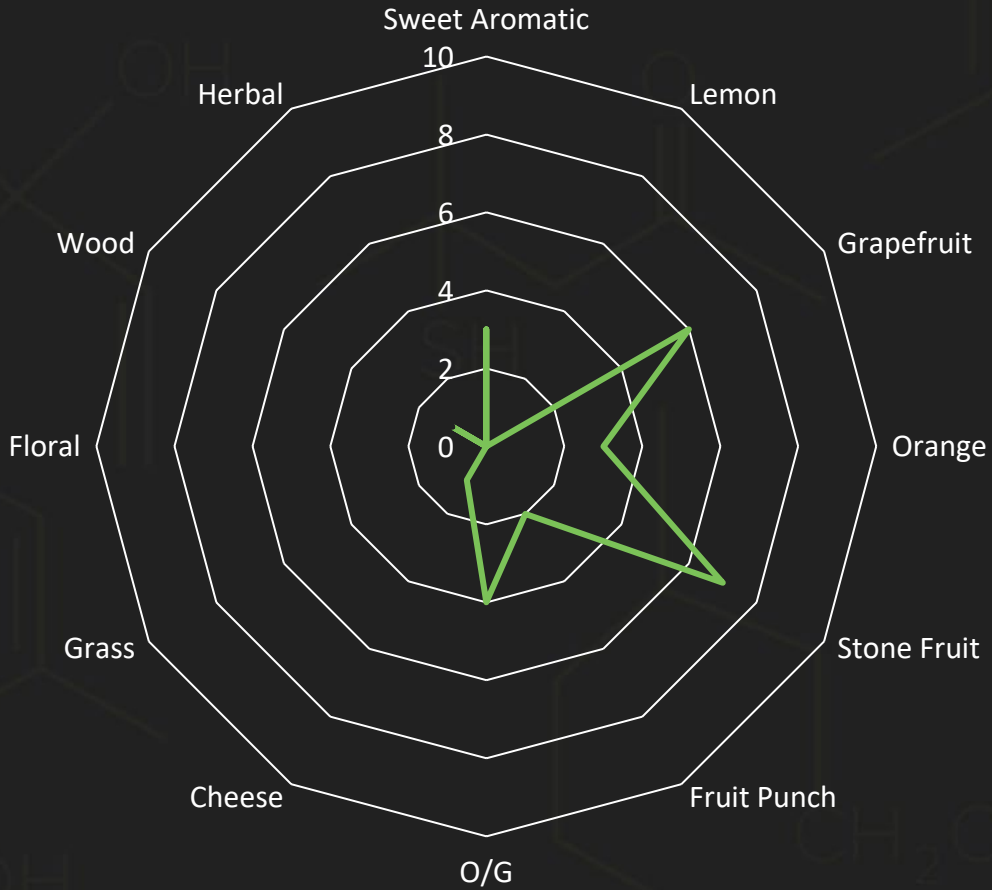
Stephanie Conn

Date: \_\_\_\_\_

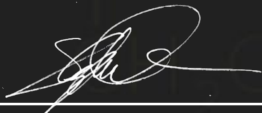
05/18/2021

\*These tests are part of the laboratory ISO/IEC 17025:2017 accredited scope. For further information, please inquire with the lab.

## Amarillo® Lot ID 19AMT90213



Lot Analysis ID	Date of Issue	Analysis Date
VG121029210518	05/18/2021	08/10/2020
Lot ID	Variety	Form
19AMT90213	Amarillo®(VGXP01)	T90 Pellet
Additional Notes		
Hop Sensory Evaluation Method (ASBC Sensory Analysis-16)		
ASBC Sensory Subcommittee Hop Lexicon		

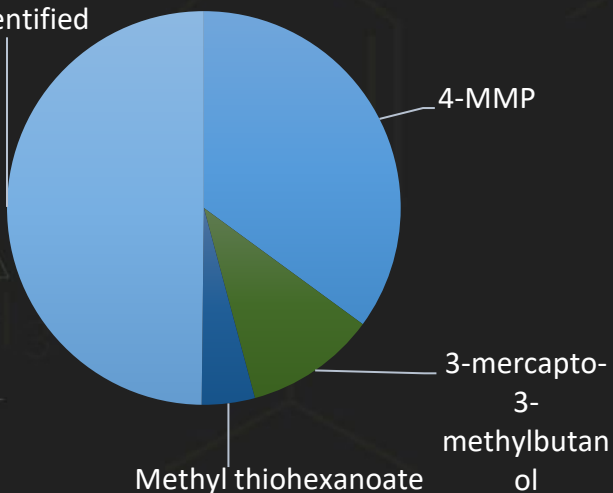
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Date: 05/18/21

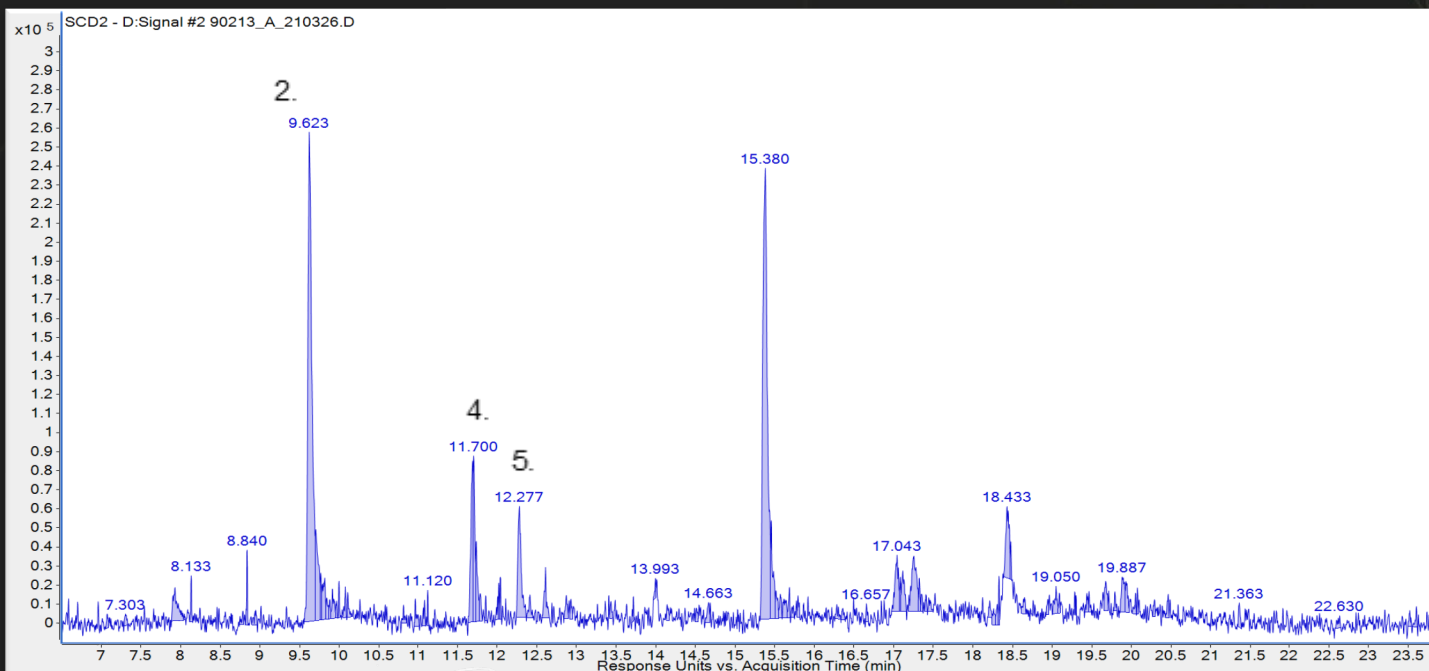
## Hop Thiol Composition


CoA ID		
VG121029210518		
Analysis Date	Lot Number	Variety
04/07/2021	19AMT90213	Amarillo® (VGXP01)
HopTechnic-004.03, Detection of Thiols in Hops		

Unidentified



Aroma Compound	% of Thiols
Dimethyl sulfide/ 2-mercaptoethanol (1)	0.00%
4-MMP (2)	35.05%
Dimethyl trisulfide (3)	0.00%
3-mercapto-3-methylbutanol (4)	10.77%
Methyl thiohexanoate (5)	4.36%
3-mercaptohexan-1-ol (3MH) (6)	0.00%
3-mercapto-4-methylpentylacetate/ 3-mercaptohexyl acetate (3MHA) (7)	0.00%
Unidentified	49.82%



Released by: 

Date: 05/18/2021

\*Percentage of thiols are based on total detected free thiols and do not account for bound thiol compounds in the sample. Compounds that coelute in the method are listed as tandem in the table and may require further elucidation to verify compound identity.