## **SGS North America**

1405 32nd Ave Brookings, SD 57006

## Certificate of Analysis



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Certificate Number: 20-009931 Report Date: August 07, 2020

**ADVANTAGE LAND CO** 

510 MAIN AVE

STE 4

Client:

Brookings SD 57006

UNITED STATES

Sample Information:

SGS Sample Identification: MW20-05606.003

Client Sample Identification: NUEHARTH - WOLSEY 1ST CUT 2020 FIELD 2

Received: July 27, 2020

Sample/Product Type: Hay

The sample condition upon arrival was acceptable for testing.

Analysis	Result	Units	L.O.Q.	Method
Relative Feed Value (RFV)	137		N/A	SDSU Extension ExEx8149 (August
				2004)

Analysis	As Received	On Dry Matter	Units	Method
Drymatter	* 83.57		%	AOAC 930.15
Moisture	* 16.43		%	AOAC 930.15
Crude protein content	* 18.00	21.50	%	AOAC 990.03
ADF	26.10	31.20	%	ANKOM Technology Method 5
NDF	36.60	43.80	%	ANKOM Technology Method 6
Total digestible nutrients	56.00	67.00	%	Calculation
Net Energy Lactation	0.58	0.69	Mcal/lb	Calculation
Net Energy Maintenance	0.56	0.67	Mcal/lb	Calculation
Net Energy Gain	0.33	0.40	Mcal/lb	Calculation
Calcium	1.85	2.21	%	ANA008CHEM
Copper	8.30	9.90	PPM	ANA008CHEM
Iron	188.00	225.00	PPM	ANA008CHEM
Potassium	2.05	2.45	%	ANA008CHEM
Magnesium	0.38	0.45	%	ANA008CHEM
Manganese	80.40	96.20	PPM	ANA008CHEM
Sodium	0.04	0.05	%	ANA008CHEM
Phosphorous	0.20	0.24	%	ANA008CHEM
Sulfur	0.26	0.31	%	ANA008CHEM
Zinc	23.00	27.50	PPM	ANA008CHEM

## Abbreviations:

L.O.Q.: Limit of Quantification L.O.D.: Limit of Detection N/A: Not Applicable N.D.: Not Detected

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SGS North America 1405 32nd Ave, Brookings, SD 57006 t (877) 692-7611 f (605) 692-5908 www.us.sgs.com/agriculture

<sup>\*</sup> Analytical results were determined by a third party laboratory. Information concerning the subcontracted laboratory is available upon request. Liability for the subcontracted results remain with the subcontracted laboratory.

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**Dustin Edmison** Laboratory Manager

Start/End Analysis: 07/27/2020 - 08/07/2020

Method References: ANA008CHEM: AOAC 2011.14

> EN17053:2018 USP <2232> EPA 200.7

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