

REPORT NO.
C24248-30015

ACCOUNT NUMBER
02138

A&L CANADA LABORATORIES INC.

2136 Jetstream Rd, London, ON, N5V 3P5 Tel (519) 457-2575 Fax: (519) 457-2664



TO:FEDERATED COOPERATIVES LIMITED

FOR:FORESTRY FARM & ZOO (JDE#10031305)

STEVE REYNOLDS
201-105TH STREET E
SASKATOON, SK S7N 1Z4

Phone:306-477-6464
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CERTIFICATE OF ANALYSIS

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LAB NUMBER:2483034

SAMPLE ID:2024 ALFALFA HAY

SAMPLE MATRIX:Hay

SAMPLE CUT:

TEST CODE:F2H

DATE SAMPLED:2024-09-03

DATE RECEIVED:2024-09-04

DATE REPORTED:

DATE PRINTED:2024-09-10

PARAMETER	RESULTS		UNIT	METHOD
	AS FED	DRY		
DRY MATTER				
Moisture	10.26	0.00	%	AOAC 930.15
Dry Matter	89.74	100.00	%	Calculation
PROTEIN				
Crude Protein	15.7	17.50	%	AGR-G-002*
Soluble Crude Protein	40.00	40.00	% of CP	Wet Chemistry
ADF-CP	1.57	1.75	%	Wet Chemistry
UIP (Bypass Protein)	30.00	30.00	Est % CP	Wet Chemistry
FIBRES				
Acid Detergent Fibre	28.45	31.70	%	Wet Chemistry
Neutral Detergent Fibre	35.17	39.19	%	Wet Chemistry
Total Digestible Nutrients	57.62	64.21	%	Calculation
MINERALS				
Calcium	1.16	1.29	%	AGR-G-004 *
Copper	8.46	9.43	ug/g	AGR-G-004*
Phosphorus	0.20	0.22	%	AGR-G-004 *
Potassium	2.23	2.48	%	AGR-G-004*
Sulphur	0.29	0.32	%	AGR-G-004 *
Magnesium	0.60	0.67	%	AGR-G-004*
Zinc	26	28.63	ug/g	AGR-G-004 *
Iron	319	355.07	ug/g	AGR-G-004 *
Manganese	39	44.00	ug/g	AGR-G-004 *
Sodium	0.04	0.04	%	AGR-G-004*
CALCULATION				
NSC	9.00	10.03	%	
Relative Feed Value	152.41	152.41		Calculation
OTHER				
Starch	1.00	1.11	%	Wet Chemistry
Crude Fat	1.09	1.22	%	AOCS Am5-04
Equine Digestible Energy	2	2.44	MCal/Kg	Calculation
ESC (Simple Sugar)	5.49	6.12	%	Wet Chemistry
WSC(Sugar)	8.00	8.92	% of DM	
NFC	30	33.00	%	
Ash	8.16	9.09	%	

* - accredited test

BDL - Not Detected



C24248-30015

The results of this report relate to the sample submitted and analyzed. All results are released based on acceptable QC data.

Results Authorized By:
Ron Pielt, Feed & Forages Specialist

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FOR:FORESTRY FARM & ZOO (JDE#10031305)

CERTIFICATE OF ANALYSIS

PAGE: 2 / 2

LAB NUMBER:2483035
SAMPLE ID:2024 GRASS HAY
SAMPLE MATRIX:Hay
SAMPLE CUT:
TEST CODE:F2H

DATE SAMPLED:2024-09-03
DATE RECEIVED:2024-09-04
DATE REPORTED:
DATE PRINTED:2024-09-10

PARAMETER	RESULTS		UNIT	METHOD
	AS FED	DRY		
DRY MATTER				
Moisture	7.72	0.00	%	AOAC 930.15
Dry Matter	92.28	100.00	%	Calculation
PROTEIN				
Crude Protein	9.8	10.62	%	AGR-G-002*
Soluble Crude Protein	46.14	46.14	% of CP	Wet Chemistry
ADF-CP	0.44	0.48	%	Wet Chemistry
UIP (Bypass Protein)	26.93	26.93	Est % CP	Wet Chemistry
FIBRES				
Acid Detergent Fibre	32.86	35.61	%	Wet Chemistry
Neutral Detergent Fibre	50.86	55.11	%	Wet Chemistry
Total Digestible Nutrients	56.44	61.16	%	Calculation
MINERALS				
Calcium	0.46	0.50	%	AGR-G-004 *
Copper	5.27	5.71	ug/g	AGR-G-004*
Phosphorus	0.20	0.22	%	AGR-G-004 *
Potassium	1.92	2.08	%	AGR-G-004*
Sulphur	0.20	0.22	%	AGR-G-004 *
Magnesium	0.18	0.19	%	AGR-G-004*
Zinc	17	18.05	ug/g	AGR-G-004 *
Iron	72	77.80	ug/g	AGR-G-004 *
Manganese	18	19.60	ug/g	AGR-G-004 *
Sodium	0.01	0.01	%	AGR-G-004*
CALCULATION				
NSC	11.56	12.53	%	
Relative Feed Value	103.24	103.24		Calculation
OTHER				
Starch	1.02	1.10	%	Wet Chemistry
Crude Fat	1.25	1.35	%	AOCS Am5-04
Equine Digestible Energy	2	2.08	MCal/Kg	Calculation
ESC (Simple Sugar)	5.56	6.02	%	Wet Chemistry
WSC(Sugar)	10.55	11.43	% of DM	
NFC	20	21.99	%	
Ash	10.09	10.93	%	

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