



FORAGE LAB AUSTRALIA

An Affiliate of Cumberland Valley Analytical Services USA

Farm: LIMERICK FARMS
Desc: GELMI BRUNSWICK
Submitter: FORAGE LAB AUSTRALIA, .
Account: ACE LABORATORY SERVICES

Copies to:

Lab ID: 29526 244
Sampled: 11/13/2020
Arrived: 11/16/2020
Completed: 11/17/2020
Reported: 11/17/2020

GELMI BRUNSWICK

SAMPLE INFORMATION

Lab ID: 29526 244 Version: 1.0
Crop Year: Series:
Feed Type: MIXED FORAGE Cutting#:
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 10.7
Dry Matter 89.3

PROTEINS

	% SP	% CP	% DM
Crude Protein			8.1
Adjusted Protein		96.3	7.8
Soluble Protein		44.1	3.6
Ammonia (CPE)	29.7	13.1	1.06
ADF Protein (ADICP)		13.7	1.11
NDF Protein (NDICP)		24.9	2.02
NDR Protein (NDRCP)			
Rumen Degr. Protein		72.0	5.8
Amino Acid Protein, Total			

FIBER

	% NDF	% DM
ADF	64.1	39.9
aNDF		62.3
aNDFom		61.1
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	8.02	4.99
NDF Digestibility (12 hr)		
NDF Digestibility (24 hr)		
NDF Digestibility (30 hr)		
NDF Digestibility (72 hr)		
NDF Digestibility (120 hr)		
NDF Digestibility (240 hr)		
uNDF (12 hr)		
uNDF (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

CARBOHYDRATES

	% Starch	% NFC	% DM
Ethanol Soluble CHO (ESC-Sugar)		46.4	10.3
Water Soluble CHO (WSC-Sugar)			14.2
Starch		9.2	2.0
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			1.57
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

MINERALS

Ash (%DM)	7.94
Calcium (%DM)	0.43
Phosphorus (%DM)	0.20
Magnesium (%DM)	0.16
Potassium (%DM)	1.94
Sulfur (%DM)	
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

ENERGY & INDEX CALCULATIONS

Equine TDN (%DM)	43.8
Equine DE (mcal/lb)	0.88
Net Energy Lactation (mj/kg)	5.28
Net Energy Maintenance (mj/kg)	5.07
Net Energy Gain (mj/kg)	2.70
ME (mj/kg)	8.63
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	4.7
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	86
Relative Forage Quality (RFQ)	
Milk per Ton (kg/tonne)	1146
Dig. Organic Matter Index (kg/tonne)	
Non Fiber Carbohydrates (%DM)	22.2
Non Structural Carbohydrates (%DM)	16.3
DCAD (meq/100gdm)	
Summative Index % (Mass Balance)	

Additional sample information, submitted documents and lab pictures linked to QR code



Values in bold were analyzed by wet chemistry methods.





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Farm: LIMERICK FARMS
Desc: ROELANDS
Submitter: FORAGE LAB AUSTRALIA, .
Account: ACE LABORATORY SERVICES

Copies to:

Lab ID: 29526 245
Sampled: 11/13/2020
Arrived: 11/16/2020
Completed: 11/17/2020
Reported: 11/17/2020

ROELANDS

SAMPLE INFORMATION

Lab ID: 29526 245 Version: 1.0
Crop Year: Series:
Feed Type: MIXED FORAGE Cutting#:
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 10.3
Dry Matter 89.7

PROTEINS

	% SP	% CP	% DM
Crude Protein			11.0
Adjusted Protein			11.0
Soluble Protein		38.8	4.3
Ammonia (CPE)	18.3	7.1	0.78
ADF Protein (ADICP)		9.7	1.06
NDF Protein (NDICP)		28.3	3.11
NDR Protein (NDRCP)			
Rumen Degr. Protein		69.4	7.6
Amino Acid Protein, Total			

FIBER

	% NDF	% DM
ADF	61.6	36.9
aNDF		59.8
aNDFom		58.3
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	6.97	4.17
NDF Digestibility (12 hr)		
NDF Digestibility (24 hr)		
NDF Digestibility (30 hr)		
NDF Digestibility (72 hr)		
NDF Digestibility (120 hr)		
NDF Digestibility (240 hr)		
uNDF (12 hr)		
uNDF (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

CARBOHYDRATES

	% Starch	% NFC	% DM
Ethanol Soluble CHO (ESC-Sugar)		46.3	10.1
Water Soluble CHO (WSC-Sugar)			13.5
Starch	9.9		2.2
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.19
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

MINERALS

Ash (%DM)	8.41
Calcium (%DM)	0.44
Phosphorus (%DM)	0.25
Magnesium (%DM)	0.19
Potassium (%DM)	2.42
Sulfur (%DM)	
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

ENERGY & INDEX CALCULATIONS

Equine TDN (%DM)	47.2
Equine DE (mcal/lb)	0.94
Net Energy Lactation (mj/kg)	5.57
Net Energy Maintenance (mj/kg)	5.54
Net Energy Gain (mj/kg)	3.14
ME (mj/kg)	9.15
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	5.5
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	94
Relative Forage Quality (RFQ)	
Milk per Ton (kg/tonne)	1327
Dig. Organic Matter Index (kg/tonne)	
Non Fiber Carbohydrates (%DM)	21.7
Non Structural Carbohydrates (%DM)	15.6
DCAD (meq/100gdm)	
Summative Index % (Mass Balance)	

Additional sample information, submitted documents and lab pictures linked to QR code



Values in bold were analyzed by wet chemistry methods.





FORAGE LAB AUSTRALIA

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Farm: LIMERICK FARMS
Desc: BOBS WATERLOO
Submitter: FORAGE LAB AUSTRALIA, .
Account: ACE LABORATORY SERVICES

Copies to:

Lab ID: 29526 246
Sampled: 11/13/2020
Arrived: 11/16/2020
Completed: 11/17/2020
Reported: 11/17/2020

BOBS WATERLOO

SAMPLE INFORMATION

Lab ID: 29526 246 Version: 1.0
Crop Year: Series:
Feed Type: MIXED FORAGE Cutting#:
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 12.8
Dry Matter 87.2

PROTEINS

	% SP	% CP	% DM
Crude Protein			9.8
Adjusted Protein		96.1	9.4
Soluble Protein		35.6	3.5
Ammonia (CPE)	4.6	1.6	0.16
ADF Protein (ADICP)		13.9	1.37
NDF Protein (NDICP)		34.9	3.43
NDR Protein (NDRCP)			
Rumen Degr. Protein		67.8	6.7
Amino Acid Protein, Total			

FIBER

	% NDF	% DM
ADF	63.2	41.9
aNDF		66.3
aNDFom		64.4
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	8.60	5.70
NDF Digestibility (12 hr)		
NDF Digestibility (24 hr)		
NDF Digestibility (30 hr)		
NDF Digestibility (72 hr)		
NDF Digestibility (120 hr)		
NDF Digestibility (240 hr)		
uNDF (12 hr)		
uNDF (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

CARBOHYDRATES

	% Starch	% NFC	% DM
Ethanol Soluble CHO (ESC-Sugar)		39.2	7.0
Water Soluble CHO (WSC-Sugar)			12.2
Starch	11.2		2.0
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			1.94
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

MINERALS

Ash (%DM)	7.50
Calcium (%DM)	0.42
Phosphorus (%DM)	0.19
Magnesium (%DM)	0.19
Potassium (%DM)	1.59
Sulfur (%DM)	
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

ENERGY & INDEX CALCULATIONS

Equine TDN (%DM)	42.5
Equine DE (mcal/lb)	0.85
Net Energy Lactation (mj/kg)	5.15
Net Energy Maintenance (mj/kg)	4.84
Net Energy Gain (mj/kg)	2.50
ME (mj/kg)	8.39
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	4.9
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	79
Relative Forage Quality (RFQ)	
Milk per Ton (kg/tonne)	1124
Dig. Organic Matter Index (kg/tonne)	
Non Fiber Carbohydrates (%DM)	17.9
Non Structural Carbohydrates (%DM)	14.2
DCAD (meq/100gdm)	
Summative Index % (Mass Balance)	

Additional sample information, submitted documents and lab pictures linked to QR code



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FORAGE LAB AUSTRALIA

An Affiliate of Cumberland Valley Analytical Services USA

Farm: LIMERICK FARMS
Desc: CROSS
Submitter: FORAGE LAB AUSTRALIA, .
Account: ACE LABORATORY SERVICES

Copies to:

Lab ID: 29526 247
Sampled: 11/15/2020
Arrived: 11/16/2020
Completed: 11/17/2020
Reported: 11/17/2020

CROSS

SAMPLE INFORMATION

Lab ID: 29526 247 Version: 1.0
Crop Year: Series:
Feed Type: MIXED FORAGE Cutting#:
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 12.0
Dry Matter 88.0

PROTEINS	% SP	% CP	% DM
Crude Protein			10.8
Adjusted Protein		95.3	10.3
Soluble Protein		33.8	3.6
Ammonia (CPE)	22.3	7.5	0.81
ADF Protein (ADICP)		14.7	1.58
NDF Protein (NDICP)		38.7	4.16
NDR Protein (NDRCP)			
Rumen Degr. Protein		66.9	7.2
Amino Acid Protein, Total			

FIBER

	% NDF	% DM
ADF	64.6	42.1
aNDF		65.2
aNDFom		63.8
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	9.75	6.36
NDF Digestibility (12 hr)		
NDF Digestibility (24 hr)		
NDF Digestibility (30 hr)		
NDF Digestibility (72 hr)		
NDF Digestibility (120 hr)		
NDF Digestibility (240 hr)		
uNDF (12 hr)		
uNDF (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

CARBOHYDRATES

	% Starch	% NFC	% DM
Ethanol Soluble CHO (ESC-Sugar)		32.4	6.2
Water Soluble CHO (WSC-Sugar)			11.1
Starch	11.1		2.1
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			1.84
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

MINERALS

Ash (%DM) 7.30
Calcium (%DM) 0.63
Phosphorus (%DM) 0.21
Magnesium (%DM) 0.24
Potassium (%DM) 1.74
Sulfur (%DM)
Sodium (%DM)
Chloride (%DM)
Iron (PPM)
Manganese (PPM)
Zinc (PPM)
Copper (PPM)
Molybdenum (PPM)

ENERGY & INDEX CALCULATIONS

Equine TDN (%DM) 43
Equine DE (mcal/lb) 0.86
Net Energy Lactation (mj/kg) 5.09
Net Energy Maintenance (mj/kg) 4.73
Net Energy Gain (mj/kg) 2.40
ME (mj/kg) 8.28
AA Protein as % of Total Protein
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)
NDF Dig. Rate (Kd, %HR, uNDF) 5.1
Starch Dig. Rate (Kd, %HR, Mertens)
Relative Feed Value (RFV) 80
Relative Forage Quality (RFQ)
Milk per Ton (kg/tonne) 1170
Dig. Organic Matter Index (kg/tonne)
Non Fiber Carbohydrates (%DM) 19.1
Non Structural Carbohydrates (%DM) 13.2
DCAD (meq/100gdm)
Summative Index % (Mass Balance)

Additional sample information, submitted documents and lab pictures linked to QR code



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