



# FORAGE LAB AUSTRALIA

An Affiliate of Cumberland Valley Analytical Services USA

**Farm:** KENNEDY  
**Desc:** OATEN HAY  
**Submitter:** FORAGE LAB AUSTRALIA, .  
**Account:** ACE LABORATORY SERVICES

**Copies to:** HENKE, MATT

**Lab ID:** 27525 176  
**Sampled:** 12/08/2019  
**Arrived:** 12/09/2019  
**Completed:** 12/10/2019  
**Reported:** 12/10/2019

## OATEN HAY

SAMPLE INFORMATION			
Lab ID:	27525 176	Version:	1.0
Crop Year:		Series:	
Feed Type:	OAT FORAGE	Cutting#:	
Package:	BASIC NIR		

NIR ANALYSIS RESULTS	
Moisture	9.1
Dry Matter	90.9

PROTEINS	% SP	% CP	% DM
Crude Protein			7.6
Adjusted Protein			7.6
Soluble Protein		53.3	4.0
Ammonia (CPE)	23.0	12.3	0.93
ADF Protein (ADICP)		12.0	0.91
NDF Protein (NDICP)		26.4	2.00
NDR Protein (NDRCP)			
Rumen Degr. Protein		76.6	5.8

FIBER	% NDF	% DM
ADF	62.0	34.0
aNDF		54.9
aNDFom		54.0
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	8.20	4.50
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 (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

CARBOHYDRATES	% Starch	% NFC	% DM
Ethanol Soluble CHO (ESC-Sugar)		46.2	14.6
Water Soluble CHO (WSC-Sugar)			21.0
Starch	7.7		2.4
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			1.76
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

MINERALS	
Ash (%DM)	6.26
Calcium (%DM)	0.39
Phosphorus (%DM)	0.25
Magnesium (%DM)	0.17
Potassium (%DM)	1.54
Sulfur (%DM)	
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

ENERGY & INDEX CALCULATIONS	
pH	
TDN (%DM)	62.5
Net Energy Lactation (mj/kg)	5.81
Net Energy Maintenance (mj/kg)	5.67
Net Energy Gain (mj/kg)	3.25
ME (mj/kg)	9.8
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	5.3
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	106
Relative Forage Quality (RFQ)	
Milk per Ton (kg/tonne)	1458
Dig. Organic Matter Index (kg/tonne)	
Non Fiber Carbohydrates (%DM)	31.50
Non Structural Carbohydrates (%DM)	17.0
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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# FORAGE LAB AUSTRALIA

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**Farm:** KENNEDY  
**Desc:** LUCERNE HAYLIDGE  
**Submitter:** FORAGE LAB AUSTRALIA, .  
**Account:** ACE LABORATORY SERVICES

**Copies to:** HENKE, MATT

**Lab ID:** 27525 177  
**Sampled:** 12/08/2019  
**Arrived:** 12/09/2019  
**Completed:** 12/10/2019  
**Reported:** 12/10/2019

## LUCERNE HAYLIDGE

SAMPLE INFORMATION			
Lab ID:	27525 177	Version:	1.0
Crop Year:		Series:	
Feed Type:	LEGUME FORAGE	Cutting#:	
Package:	BASIC NIR		

NIR ANALYSIS RESULTS	
Moisture	15.5
Dry Matter	84.5

PROTEINS	% SP	% CP	% DM
Crude Protein			23.5
Adjusted Protein			23.5
Soluble Protein		41.2	9.7
Ammonia (CPE)	11.5	4.7	1.11
ADF Protein (ADICP)		6.0	1.41
NDF Protein (NDICP)		11.3	2.65
NDR Protein (NDRCP)			
Rumen Degr. Protein		70.6	16.6

FIBER	% NDF	% DM
ADF	85.5	29.8
aNDF		34.9
aNDFom		34.4
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	20.3	7.09
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 (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

CARBOHYDRATES	% Starch	% NFC	% DM
Ethanol Soluble CHO (ESC-Sugar)		21.7	6.7
Water Soluble CHO (WSC-Sugar)			7.7
Starch			
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.31
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

MINERALS	
Ash (%DM)	11.2
Calcium (%DM)	1.48
Phosphorus (%DM)	0.34
Magnesium (%DM)	0.34
Potassium (%DM)	3.50
Sulfur (%DM)	
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

ENERGY & INDEX CALCULATIONS	
pH	
TDN (%DM)	61.9
Net Energy Lactation (mj/kg)	5.74
Net Energy Maintenance (mj/kg)	5.57
Net Energy Gain (mj/kg)	3.16
ME (mj/kg)	9.7
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	5.3
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	175
Relative Forage Quality (RFQ)	
Milk per Ton (kg/tonne)	1457
Dig. Organic Matter Index (kg/tonne)	
Non Fiber Carbohydrates (%DM)	30.90
Non Structural Carbohydrates (%DM)	6.7
DCAD (meq/100gdm)	
Summative Index % (Mass Balance)	

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