



# CUMBERLAND VALLEY ANALYTICAL SERVICES

Laboratory services for agriculture ... from the field to the feed bunk.

**Farm:** FORMULA FORAGE AUSTRALIA  
**Desc:** 11077/15 WHEATEN SILAGE 1  
**Submitter:** NIR BILLABLE ACCOUNT, MALCOLM  
**Account:** ACE LABORATORY SERVICES

**Copies to:**

**Lab ID:** 19318 368  
**Sampled:** 12/13/2015  
**Arrived:** 12/14/2015  
**Completed:** 12/15/2015  
**Reported:** 12/15/2015

## 11077/15 WHEATEN SILAGE 1

### SAMPLE INFORMATION

Lab ID: 19318 368 Version: 1.0  
Crop Year: Series:  
Feed Type: WHEAT FORAGE Cutting#:  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 44.1  
Dry Matter 55.9

### PROTEINS

	% SP	% CP	% DM
Crude Protein			11.6
Adjusted Protein			
Soluble Protein		61.5	7.2
Ammonia (CPE)	14.8	9.1	1.06
ADF Protein (ADICP)		8.0	0.93
NDF Protein (NDICP)		12.6	1.46
NDR Protein (NDRCP)			
Rumen Degr. Protein		80.7	9.4
Rumen Deg. CP (Strep.G)			

### FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			63.2	28.2
aNDF		42.8		44.6
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			9.01	4.02
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	53.7	23.0	51.5	23.0
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	61.7	26.4	59.1	26.4
NDF Digestibility (240 hr)	64.7	27.7	62.2	27.8
uNDF (30 hr)	46.3	19.8	48.5	21.6
uNDF (120 hr)	38.4	16.4	40.9	18.2
uNDF (240 hr)	35.3	15.1	37.8	16.9

### CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids		14.3	5.2
Ethanol Soluble CHO (Sugar)		8.0	2.9
Water Soluble CHO (Sugar)			
Starch		63.3	23.1
Soluble Fiber		7.6	2.77
Starch Dig. (7 hr, 4 mm)			
Fatty Acids, Total			1.94
Fatty Acids (%Fat)			70.5
Crude Fat			2.75

### MINERALS

Ash (%DM)	5.95
Calcium (%DM)	0.26
Phosphorus (%DM)	0.24
Magnesium (%DM)	0.14
Potassium (%DM)	1.18
Sulfur (%DM)	0.18
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Nitrate Ion (%DM)	
Selenium (PPM)	
Molybdenum (PPM)	

### QUALITATIVE

Total VFA (%DM)	5.23
Lactic Acid (%DM)	2.48
Lactic as % of Total VFA	48
Acetic Acid (%DM)	1.58
Butyric Acid (%DM)	1.17
1, 2 Propanediol (%DM)	
Titrateable Acidity (meq/100gm)	5.83

Soil Contamination Probability	Probable low to none
Nitrate Probability	Probable low nitrate level
NIR Statistical Confidence	Good prediction potential

### ENERGY & INDEX CALCULATIONS

pH	4.04
TDN (%DM)	67.7
Net Energy Lactation (mj/kg)	6.39
Net Energy Maintenance (mj/kg)	6.41
Net Energy Gain (mj/kg)	3.92
ME (mj/kg DM)	10.60
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.37
NDF Dig. Rate (Kd, %HR, uNDF)	7.98
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	140
Relative Feed Quality (RFQ)	163
Milk per Ton (kg/tonne)	1661
Dig. Organic Matter Index (kg/tonne)	405
Non Fiber Carbohydrates (%DM)	35.1
Non Structural Carbohydrates (%DM)	26.0
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	7.0
Summative Index % (Mass Balance)	95.8
Additional sample information, source and lab pictures	



Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms



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