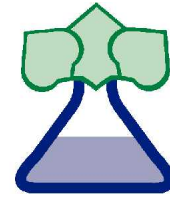


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NIR Complete Sample Report

BRIAN WING
 16975 S HWY 220
 CASPER WY 82604

Account Number: 75197

Date Sampled: 09/30/2020
 Date Received: 10/05/2020
 Date Reported: 10/05/2020

Name: BRIAN WING
 Sample ID: BIG PIVOT

Lab Number: 16244



Constituent Analyzed	As Received	Oven Dry
Moisture, %	12.2	0.0
Dry Matter, %	87.8	100.0
Crude Protein, %	17.6	20.0
Acid Detergent Fiber, %	21.4	24.4
Neutral Detergent Fiber, % (aNDF w/Na2SO3)	27.5	31.3
Digestible Neutral Detergent Fiber	14.1	16.1
Fat	2.80	3.19
Ash	8.90	10.13
Lignin	3.95	4.50
Sugar	9.92	11.30
Calcium, %	1.41	1.60
Phosphorus, %	0.22	0.25
Magnesium, %	0.23	0.26
Potassium, %	2.07	2.36
Heat Damaged Protein, %	0.2	0.2
Available Protein, %	17.6	20.0
Digestible Protein Estimated, %	12.9	14.7
TDN Estimated, %	63.8	72.6
ENE Estimated, Therms/cwt	54.7	62.3
NE/Lactation, Mcal/lb	0.66	0.75
NE/Maintenance, Mcal/lb	0.68	0.78
NE/Gain, Mcal/lb	0.44	0.50
Relative Feed Value (RFV)		208.1
Relative Forage Quality (RFQ)		220.1

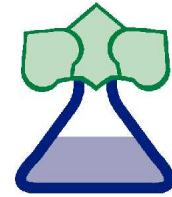
Interpretation of Relative Feed Value (RFV) for Alfalfa Only

Quality	RFV	Uses
Supreme	> 185	Prime dairy
Premium	170 - 185	Good dairy, young heifers, excellent for backgrounding
Good	150 - 170	Good beef, older heifers, marginal for dairy cows
Fair	130 - 150	Maintenance for beef or dry dairy cows
Utility	< 130	Poor quality

BY: _____

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NIR Complete Sample Report

BRIAN WING
16975 S HWY 220
CASPER WY 82604

Account Number: 75197

Date Sampled: 09/30/2020
Date Received: 10/05/2020
Date Reported: 10/05/2020

Name: BRIAN WING
Sample ID: HOME FIELD

Lab Number: 16245



Constituent Analyzed	As Received	Oven Dry
Moisture, %	13.9	0.0
Dry Matter, %	86.1	100.0
Crude Protein, %	19.3	22.4
Acid Detergent Fiber, %	16.7	19.4
Neutral Detergent Fiber, % (aNDF w/Na2SO3)	21.4	24.9
Digestible Neutral Detergent Fiber	11.4	13.2
Fat	2.70	3.14
Ash	9.47	11.00
Lignin	3.44	4.00
Sugar	10.60	12.31
Calcium, %	1.46	1.70
Phosphorus, %	0.25	0.29
Magnesium, %	0.21	0.24
Potassium, %	2.37	2.75
Heat Damaged Protein, %	0.2	0.3
Available Protein, %	19.3	22.4
Digestible Protein Estimated, %	14.1	16.4
TDN Estimated, %	67.1	77.9
ENE Estimated, Therms/cwt	57.8	67.1
NE/Lactation, Mcal/lb	0.70	0.81
NE/Maintenance, Mcal/lb	0.74	0.85
NE/Gain, Mcal/lb	0.49	0.56
Relative Feed Value (RFV)		276.1
Relative Forage Quality (RFQ)		290.5

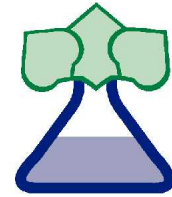
Interpretation of Relative Feed Value (RFV) for Alfalfa Only

Quality	RFV	Uses
Supreme	> 185	Prime dairy
Premium	170 - 185	Good dairy, young heifers, excellent for backgrounding
Good	150 - 170	Good beef, older heifers, marginal for dairy cows
Fair	130 - 150	Maintenance for beef or dry dairy cows
Utility	< 130	Poor quality

BY: _____

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NIR Complete Sample Report

BRIAN WING
16975 S HWY 220
CASPER WY 82604

Account Number: 75197

Date Sampled: 09/30/2020
Date Received: 10/05/2020
Date Reported: 10/05/2020

Name: BRIAN WING
Sample ID: MIDDLE PIVOT

Lab Number: 16246



Constituent Analyzed	As Received	Oven Dry
Moisture, %	11.4	0.0
Dry Matter, %	88.6	100.0
Crude Protein, %	18.0	20.3
Acid Detergent Fiber, %	22.6	25.5
Neutral Detergent Fiber, % (aNDF w/Na2SO3)	27.0	30.4
Digestible Neutral Detergent Fiber	12.5	14.2
Fat	2.83	3.19
Ash	8.73	9.86
Lignin	4.45	5.03
Sugar	9.79	11.05
Calcium, %	1.60	1.81
Phosphorus, %	0.21	0.24
Magnesium, %	0.23	0.26
Potassium, %	1.72	1.94
Heat Damaged Protein, %	0.2	0.2
Available Protein, %	18.0	20.3
Digestible Protein Estimated, %	13.3	15.0
TDN Estimated, %	63.3	71.4
ENE Estimated, Therms/cwt	54.2	61.2
NE/Lactation, Mcal/lb	0.66	0.74
NE/Maintenance, Mcal/lb	0.68	0.76
NE/Gain, Mcal/lb	0.43	0.49
Relative Feed Value (RFV)		211.2
Relative Forage Quality (RFQ)		215.1

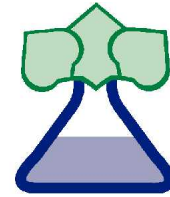
Interpretation of Relative Feed Value (RFV) for Alfalfa Only

Quality	RFV	Uses
Supreme	> 185	Prime dairy
Premium	170 - 185	Good dairy, young heifers, excellent for backgrounding
Good	150 - 170	Good beef, older heifers, marginal for dairy cows
Fair	130 - 150	Maintenance for beef or dry dairy cows
Utility	< 130	Poor quality

BY: _____

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NIR Complete Sample Report

BRIAN WING
 16975 S HWY 220
 CASPER WY 82604

Account Number: 75197

Date Sampled: 09/30/2020
 Date Received: 10/05/2020
 Date Reported: 10/05/2020

Name: BRIAN WING
 Sample ID: BULL PAST

Lab Number: 16247



Constituent Analyzed	As Received	Oven Dry
Moisture, %	14.4	0.0
Dry Matter, %	85.6	100.0
Crude Protein, %	19.0	22.2
Acid Detergent Fiber, %	21.1	24.6
Neutral Detergent Fiber, % (aNDF w/Na2SO3)	24.4	28.5
Digestible Neutral Detergent Fiber	11.2	13.1
Fat	2.57	3.01
Ash	8.74	10.22
Lignin	4.14	4.84
Sugar	8.58	10.03
Calcium, %	1.50	1.75
Phosphorus, %	0.23	0.27
Magnesium, %	0.24	0.28
Potassium, %	1.94	2.26
Heat Damaged Protein, %	0.2	0.3
Available Protein, %	19.0	22.2
Digestible Protein Estimated, %	13.9	16.2
TDN Estimated, %	61.9	72.4
ENE Estimated, Therms/cwt	53.1	62.1
NE/Lactation, Mcal/lb	0.64	0.75
NE/Maintenance, Mcal/lb	0.66	0.78
NE/Gain, Mcal/lb	0.43	0.50
Relative Feed Value (RFV)		227.4
Relative Forage Quality (RFQ)		231.0

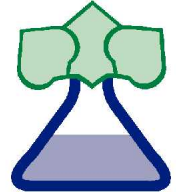
Interpretation of Relative Feed Value (RFV) for Alfalfa Only

Quality	RFV	Uses
Supreme	> 185	Prime dairy
Premium	170 - 185	Good dairy, young heifers, excellent for backgrounding
Good	150 - 170	Good beef, older heifers, marginal for dairy cows
Fair	130 - 150	Maintenance for beef or dry dairy cows
Utility	< 130	Poor quality

BY: _____

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Relative feed value (RFV) :

An index for ranking cool-season grass and legume forages based on combining digestible and intake potential. Calculated from ADF and NDF. The higher the RFV, the better the quality. It is used to compare varieties, match hay/silage inventories to animals, and to market hay.

Relative forage quality (RFQ) :

An index for ranking cool-season grass and legume forages based on TDN and intake potential. Calculated from NDF, CP, EE, NDFD, ADF, and NFC. It matches animal performance better than RFV across a wide range of forages.