

Account No. : 858

NIR Analysis Report

WYOMING HAY SHOW, STATE FAIR  
WYOMING HAY AND FORAGE ASSOCIATIO  
PO BOX 601  
LINGLE WY 82223-0601

Invoice No. : 1295158  
Date Received : 08/12/2019  
Date Reported : 08/12/2019  
Lab Number : 5563

Results For : CODY SCOTT  
Sample ID : YP #1  
Description : 1ST CUTTING ALFALFA

	Analysis As Received	Analysis Dry Basis
Moisture, %	9.20	0.00
Dry Matter, %	90.80	100.00
<b>PROTEIN</b>		
Crude Protein, %	24.3	26.8
<b>FIBERS</b>		
Acid Detergent Fiber, %	19.3	21.3
Neutral Detergent Fiber, %	21.9	24.1
NDFD (digestibility) 48 hr, % of NDF		52
IVTDMD (in vitro true digestibility) 48 hr, %	79.7	87.8
<b>ENERGIES</b>		
TDN Est., %	60.3	66.4
Net Energy Lact, MCal/lb	0.6203	0.6832
Net Energy Maint, MCal/lb	0.6262	0.6897
Net Energy Gain, MCal/lb	0.3816	0.4202
<b>QUALITY VALUE</b>		
Relative Feed Value		279
Relative Forage Quality		297
<b>MINERALS</b>		
Calcium, % Ca	1.55	1.71
Phosphorus, % P	0.27	0.30
Potassium, % K	2.18	2.40
Magnesium, % Mg	0.42	0.46
Ash, %	8.67	9.55
<b>OTHER ANALYSIS</b>		
Fat, %	1.8	2.0
Starch, %	1.4	1.5
Lignin, %	4.08	4.49
Non Fiber Carbohydrates, %	35.9	39.6
Ethanol-Soluble Carbohydrates, %	10.4	11.5
Water-Soluble Carbohydrates, %	9.9	10.9

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PO BOX 601  
LINGLE WY 82223

Invoice No. : 1294943  
Date Received : 08/08/2019  
Date Reported : 08/08/2019  
Lab Number : 5414

Results For : NICHOLAS GUTIERREZ  
Sample ID : YP #2 2ND CUT  
Description : ALFALFA HAY

	Analysis As Received	Analysis Dry Basis
Moisture, %	31.18	0.00
Dry Matter, %	68.82	100.00
<b>PROTEIN</b>		
Crude Protein, %	19.0	27.6
<b>FIBERS</b>		
Acid Detergent Fiber, %	17.6	25.6
Neutral Detergent Fiber, %	20.9	30.4
NDFD (digestibility) 48 hr, % of NDF		52
IVTDMD (in vitro true digestibility) 48 hr, %	58.8	85.4
<b>ENERGIES</b>		
TDN Est., %	43.4	63.1
Net Energy Lact, MCal/lb	0.4454	0.6473
Net Energy Maint, MCal/lb	0.4419	0.6421
Net Energy Gain, MCal/lb	0.2598	0.3775
<b>QUALITY VALUE</b>		
Relative Feed Value		211
Relative Forage Quality		234
<b>MINERALS</b>		
Calcium, % Ca	0.83	1.20
Phosphorus, % P	0.25	0.36
Potassium, % K	1.51	2.20
Magnesium, % Mg	0.32	0.47
Ash, %	5.22	7.58
<b>OTHER ANALYSIS</b>		
Fat, %	1.7	2.4
Starch, %	1.1	1.6
Lignin, %	3.98	5.79
Non Fiber Carbohydrates, %	23.3	33.9
Ethanol-Soluble Carbohydrates, %	5.2	7.6
Water-Soluble Carbohydrates, %	4.2	6.2

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Invoice No. : 1295158  
Date Received : 08/12/2019  
Date Reported : 08/12/2019  
Lab Number : 5562

Results For : CODY SCOTT  
Sample ID : YP #3 2nd cut  
Description : ALFALFA

	Analysis As Received	Analysis Dry Basis
Moisture, %	10.08	0.00
Dry Matter, %	89.92	100.00
<b>PROTEIN</b>		
Crude Protein, %	22.2	24.7
<b>FIBERS</b>		
Acid Detergent Fiber, %	23.5	26.1
Neutral Detergent Fiber, %	26.9	29.9
NDFD (digestibility) 48 hr, % of NDF		50
IVTDMD (in vitro true digestibility) 48 hr, %	76.2	84.7
<b>ENERGIES</b>		
TDN Est., %	56.4	62.8
Net Energy Lact, MCal/lb	0.5784	0.6432
Net Energy Maint, MCal/lb	0.5726	0.6368
Net Energy Gain, MCal/lb	0.3351	0.3726
<b>QUALITY VALUE</b>		
Relative Feed Value		213
Relative Forage Quality		225
<b>MINERALS</b>		
Calcium, % Ca	1.46	1.62
Phosphorus, % P	0.27	0.30
Potassium, % K	2.57	2.86
Magnesium, % Mg	0.31	0.34
Ash, %	8.87	9.86
<b>OTHER ANALYSIS</b>		
Fat, %	1.6	1.8
Starch, %	1.9	2.1
Lignin, %	4.71	5.24
Non Fiber Carbohydrates, %	32.2	35.8
Ethanol-Soluble Carbohydrates, %	8.5	9.4
Water-Soluble Carbohydrates, %	8.8	9.8

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Invoice No. : 1294943  
Date Received : 08/08/2019  
Date Reported : 08/08/2019  
Lab Number : 5415

Results For : NICHOLAS GUTIERREZ  
Sample ID : YP #4 3RD CUT  
Description : ALFALFA HAY

	Analysis As Received	Analysis Dry Basis
Moisture, %	10.91	0.00
Dry Matter, %	89.09	100.00
<b>PROTEIN</b>		
Crude Protein, %	24.7	27.7
<b>FIBERS</b>		
Acid Detergent Fiber, %	18.1	20.4
Neutral Detergent Fiber, %	20.8	23.4
NDFD (digestibility) 48 hr, % of NDF		58
IVTDMD (in vitro true digestibility) 48 hr, %	79.0	88.6
<b>ENERGIES</b>		
TDN Est., %	59.8	67.1
Net Energy Lact, MCal/lb	0.6158	0.6912
Net Energy Maint, MCal/lb	0.6238	0.7002
Net Energy Gain, MCal/lb	0.3828	0.4296
<b>QUALITY VALUE</b>		
Relative Feed Value		290
Relative Forage Quality		326
<b>MINERALS</b>		
Calcium, % Ca	1.09	1.22
Phosphorus, % P	0.29	0.33
Potassium, % K	2.33	2.61
Magnesium, % Mg	0.35	0.39
Ash, %	7.30	8.19
<b>OTHER ANALYSIS</b>		
Fat, %	1.8	2.0
Starch, %	1.4	1.6
Lignin, %	4.03	4.52
Non Fiber Carbohydrates, %	36.2	40.7
Ethanol-Soluble Carbohydrates, %	10.3	11.5
Water-Soluble Carbohydrates, %	9.7	10.9

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LINGLE WY 82223

Invoice No. : 1294943  
Date Received : 08/08/2019  
Date Reported : 08/08/2019  
Lab Number : 5416

Results For : NICHOLAS GUTIERREZ  
Sample ID : YP #5 2ND CUT  
Description : GA MIX OVER 50

	Analysis As Received	Analysis Dry Basis
Moisture, %	10.24	0.00
Dry Matter, %	89.76	100.00
<b>PROTEIN</b>		
Crude Protein, %	17.2	19.1
<b>FIBERS</b>		
Acid Detergent Fiber, %	28.7	32.0
Neutral Detergent Fiber, %	39.2	43.7
NDFD (digestibility) 48 hr, % of NDF		49
IVTDMD (in vitro true digestibility) 48 hr, %	69.5	77.4
<b>ENERGIES</b>		
TDN Est., %	59.3	66.1
Net Energy Lact, MCal/lb	0.6118	0.6816
Net Energy Maint, MCal/lb	0.6156	0.6858
Net Energy Gain, MCal/lb	0.3741	0.4168
<b>QUALITY VALUE</b>		
Relative Feed Value		136
Relative Forage Quality		128
<b>MINERALS</b>		
Calcium, % Ca	0.94	1.05
Phosphorus, % P	0.22	0.25
Potassium, % K	2.11	2.35
Magnesium, % Mg	0.24	0.27
Ash, %	6.71	7.48
<b>OTHER ANALYSIS</b>		
Fat, %	1.8	2.0
Starch, %	2.1	2.3
Lignin, %	5.79	6.45
Non Fiber Carbohydrates, %	26.2	29.2
Ethanol-Soluble Carbohydrates, %	6.7	7.4
Water-Soluble Carbohydrates, %	7.6	8.4

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Invoice No. : 1295158  
Date Received : 08/12/2019  
Date Reported : 08/12/2019  
Lab Number : 5564

Results For : CODY SCOTT  
Sample ID : YP #6 1st cut  
Description : GRASS/ALFALFA MIX

	Analysis As Received	Analysis Dry Basis
Moisture, %	9.16	0.00
Dry Matter, %	90.84	100.00
<b>PROTEIN</b>		
Crude Protein, %	16.0	17.6
<b>FIBERS</b>		
Acid Detergent Fiber, %	27.0	29.7
Neutral Detergent Fiber, %	43.1	47.5
NDFD (digestibility) 48 hr, % of NDF		61
IVTDMD (in vitro true digestibility) 48 hr, %	73.4	80.8
<b>ENERGIES</b>		
TDN Est., %	62.4	68.6
Net Energy Lact, MCal/lb	0.6449	0.7099
Net Energy Maint, MCal/lb	0.6566	0.7227
Net Energy Gain, MCal/lb	0.4085	0.4497
<b>QUALITY VALUE</b>		
Relative Feed Value		129
Relative Forage Quality		149
<b>MINERALS</b>		
Calcium, % Ca	0.84	0.93
Phosphorus, % P	0.22	0.24
Potassium, % K	2.63	2.89
Magnesium, % Mg	0.23	0.25
Ash, %	6.94	7.64
<b>OTHER ANALYSIS</b>		
Fat, %	2.7	3.0
Starch, %	1.2	1.3
Lignin, %	4.42	4.87
Non Fiber Carbohydrates, %	24.4	26.8
Ethanol-Soluble Carbohydrates, %	6.0	6.6
Water-Soluble Carbohydrates, %	7.6	8.3

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Invoice No. : 1294943  
Date Received : 08/08/2019  
Date Reported : 08/08/2019  
Lab Number : 5417

Results For : NICHOLAS GUTIERREZ  
Sample ID : YP #7 2ND CUT  
Description : GA MIX OVER 50

	Analysis As Received	Analysis Dry Basis
Moisture, %	10.07	0.00
Dry Matter, %	89.93	100.00
<b>PROTEIN</b>		
Crude Protein, %	16.5	18.4
<b>FIBERS</b>		
Acid Detergent Fiber, %	23.8	26.5
Neutral Detergent Fiber, %	36.3	40.4
NDFD (digestibility) 48 hr, % of NDF		64
IVTDMD (in vitro true digestibility) 48 hr, %	76.7	85.3
<b>ENERGIES</b>		
TDN Est., %	65.1	72.3
Net Energy Lact, MCal/lb	0.6754	0.7510
Net Energy Maint, MCal/lb	0.6975	0.7756
Net Energy Gain, MCal/lb	0.4465	0.4965
<b>QUALITY VALUE</b>		
Relative Feed Value		157
Relative Forage Quality		168
<b>MINERALS</b>		
Calcium, % Ca	0.92	1.02
Phosphorus, % P	0.25	0.28
Potassium, % K	2.22	2.47
Magnesium, % Mg	0.26	0.29
Ash, %	6.81	7.57
<b>OTHER ANALYSIS</b>		
Fat, %	2.5	2.8
Starch, %	3.5	3.9
Lignin, %	3.98	4.43
Non Fiber Carbohydrates, %	29.8	33.2
Ethanol-Soluble Carbohydrates, %	8.1	9.0
Water-Soluble Carbohydrates, %	9.8	10.9

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Invoice No. : 1294943  
Date Received : 08/08/2019  
Date Reported : 08/08/2019  
Lab Number : 5418

Results For : TAG THOMPSON  
Sample ID : YP #8 2ND CUT  
Description : MIXED HAY UP TO 50 ALFALFA

	Analysis As Received	Analysis Dry Basis
Moisture, %	12.11	0.00
Dry Matter, %	87.89	100.00
<b>PROTEIN</b>		
Crude Protein, %	17.5	19.9
<b>FIBERS</b>		
Acid Detergent Fiber, %	25.9	29.5
Neutral Detergent Fiber, %	36.2	41.2
NDFD (digestibility) 48 hr, % of NDF		56
IVTDMD (in vitro true digestibility) 48 hr, %	73.5	83.6
<b>ENERGIES</b>		
TDN Est., %	60.6	68.9
Net Energy Lact, MCal/lb	0.6264	0.7127
Net Energy Maint, MCal/lb	0.6384	0.7264
Net Energy Gain, MCal/lb	0.3981	0.4529
<b>QUALITY VALUE</b>		
Relative Feed Value		149
Relative Forage Quality		143
<b>MINERALS</b>		
Calcium, % Ca	1.15	1.31
Phosphorus, % P	0.24	0.27
Potassium, % K	2.29	2.60
Magnesium, % Mg	0.27	0.31
Ash, %	6.56	7.46
<b>OTHER ANALYSIS</b>		
Fat, %	2.3	2.6
Starch, %	0.8	0.9
Lignin, %	5.34	6.08
Non Fiber Carbohydrates, %	27.2	31.0
Ethanol-Soluble Carbohydrates, %	7.4	8.4
Water-Soluble Carbohydrates, %	8.5	9.7

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Invoice No. : 1295158  
Date Received : 08/12/2019  
Date Reported : 08/12/2019  
Lab Number : 5565

Results For : CODY SCOTT  
Sample ID : YP #9 1st cut  
Description : GRASS HAY

	Analysis As Received	Analysis Dry Basis
Moisture, %	8.94	0.00
Dry Matter, %	91.06	100.00
<b>PROTEIN</b>		
Crude Protein, %	15.0	16.5
<b>FIBERS</b>		
Acid Detergent Fiber, %	24.4	26.8
Neutral Detergent Fiber, %	51.3	56.3
NDFD (digestibility) 48 hr, % of NDF		67
IVTDMD (in vitro true digestibility) 48 hr, %	74.3	81.6
<b>ENERGIES</b>		
TDN Est., %	65.6	72.0
Net Energy Lact, MCal/lb	0.6805	0.7474
Net Energy Maint, MCal/lb	0.7020	0.7709
Net Energy Gain, MCal/lb	0.4483	0.4923
<b>QUALITY VALUE</b>		
Relative Feed Value		112
Relative Forage Quality		159
<b>MINERALS</b>		
Calcium, % Ca	0.23	0.25
Phosphorus, % P	0.23	0.25
Potassium, % K	1.74	1.91
Magnesium, % Mg	0.22	0.24
Ash, %	5.65	6.21
<b>OTHER ANALYSIS</b>		
Fat, %	2.3	2.5
Starch, %	2.2	2.4
Lignin, %	3.31	3.64
Non Fiber Carbohydrates, %	18.6	20.5
Ethanol-Soluble Carbohydrates, %	9.4	10.3
Water-Soluble Carbohydrates, %	10.3	11.3

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