Trial Number: Alfalfa 01 AgroLiquid Sure K Trial

Objective: Evaluate Sure K application on forage yield and analysis for 2nd and 3rd cuttings.

SOUTHWESTERN COLORADO RESEARCH CENTER COLORADO STATE UNIVERSITY

Preplant

Totals

0.00

Fertilizer Rate/A (lb/ Timing

0.0

Location: SWCRC Yellow Jacket, CO

Researcher(s): Kathleen Russell

Cooperator: Jeramie Black RNM AgriTurf

Crop: Alfalfa
Field Area: 8.02 acres
Treatment Area: 4.01 acres

Planting Date:

 Harvest Date:
 8/3/2018
 2nd cut

 9/24/2018
 3rd cut

Harvest Device: JD 995 Rotary Swather Weighing Device: Calibrated Scale

Soil Type: Wetherill Loam

Trial Results:

 Previous Crop:
 P205:
 0.0
 Preplant
 0.00

 K20:
 0.0
 Preplant
 0.00

 0-0-0-90 (S)
 0.0
 Preplant
 0.00

N:

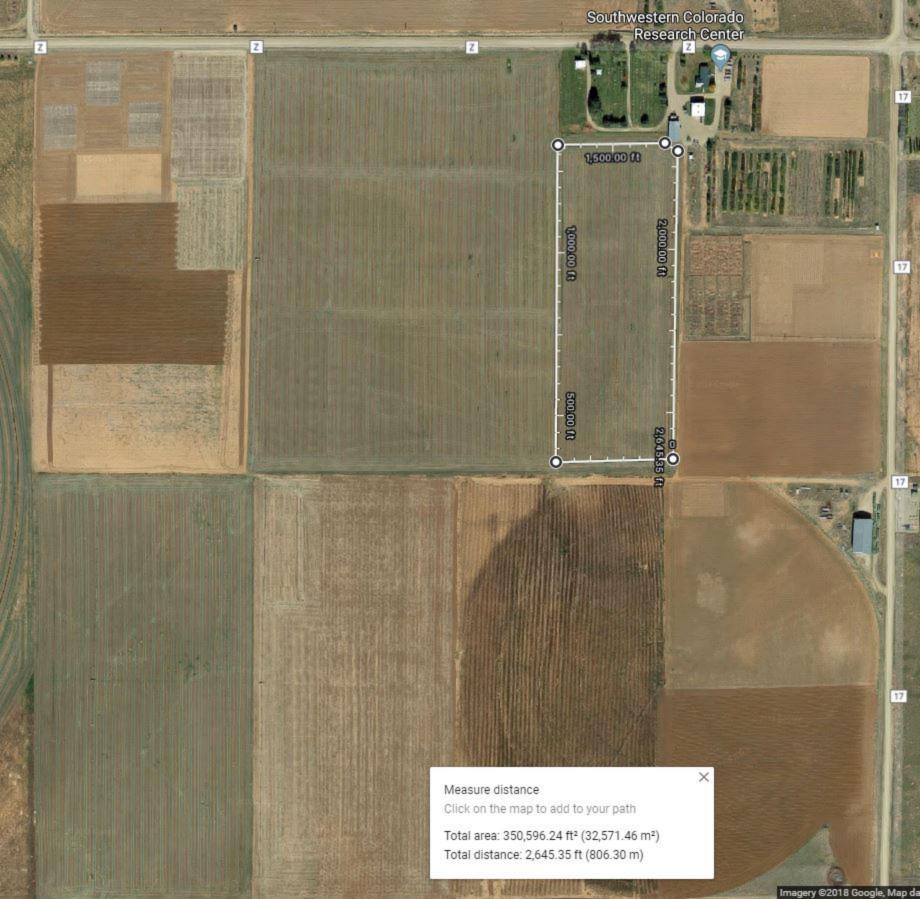
Row Width (in): 2-1-6 (Sure K) 3 gallon Post 1st cut 3 gal/A
Tillage: 9 post 2nd cut 3 gal/A

Notes: 3rd cutting was low yielding and baling was not accurate based on treatment perimeters. Treatment applied: 6/27/18 (post 1st cut), 8/13/18 (post 2nd cut)

		Yield (lbs.)	# Bales	lbs./bale	Yield (lb/a)	Yield (ton/a)
2nd Cut:	Treated	13220	7	1888	3305	1.65
	Untreated	11040	6	1840	2760	1 38

Harvest Rows:

Treatment Difference: 2180





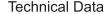
Sure-K 2-1-6

Guaranteed Analysis

0.41% Nitrate Nitrogen

1.00% Urea Nitrogen
Available Phosphate(P₂O₅)------- 1.00%

Derived from: Ammonium Nitrate, Ammonium Polyphosphate, Potassium Polyphosphate, Potassium Carbonate, Urea



Net Content: Bulk as Invoiced	
Weight Per Gallon lbs/gal @68° F	9.42
Specific Gravity	1.128
pH at 68° F 6	.3-6.7
Freezing Point	34° F

For proper agronomic application rates suitable for your geographical area or the maximum allowable non-nutrient application rate per acre, consult a trained soil specialist at AgroLiquid or call or write to AgroLiquid with the address provided.

NOTE: Information regarding the contents and levels of metals in this product is available on the internet at http://www.aapfco.org/metals.htm





Guaranteed by: AgroLiquid

Division of COG Marketers, Ltd. 3055 W M-21 St. Johns, MI 48879 agroliquid.com

www.servitechlabs.com

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800.557.7509 **Fax:** 620.227.2047

1816 E. Wyatt Earp • PO Box 1397 • Dodge City, KS 67801

Lab No.: 37213		FEED A	NALYSIS RE	PORT	Date Reported: 08/14/2018
Send To: 18100	COLORADO AG EXP STATION SW COLORADO RESEARCH CENTI KATIE RUSSELL PO BOX 233 YELLOW JACKET, CO 81335		CH CENTER		2018 Certified Chemistry Dy (NFTA) DM DDF
Feedstuff Description: Sample Identification: Date Received: Invoice No.:	TREATED 08/13/2018 592583				Edwin J. Mc Dewie Ed McGuire Data Review Coordinator
Feed Analysis Results	As	Received	100% Dry Matter		
Moisture, %		8.5			
Dry Matter, %		91.5			
Crude Protein, %		20.4	22.3		
Acid Detergent Fiber, % Al	DF	28.6	31.3		
Neutral Detergent Fiber, %	NDF	34.2	37.4		
Total Digestible Nutrients,	% TDN	59.5	65.1		
Net Energy, Maint, Mcal/lb	,	0.61	0.67		
Net Energy, Gain, Mcal/lb		0.37	0.40		
Net Energy, Lact, Mcal/lb		0.61	0.67		
Digestible Energy, Mcal/lb	Beef D.E.	1.19	1.30		
Met. Energy, Beef, Mcal/lb		0.98	1.07		
Relative Feed Value, (RF	V)		161		

RELATIVE FEED VALUE: Formula used: RFV

Potassium, % K

 $RFV = (DDM \times DMI) / 1.29$

1.88

 $DDM = 88.9 - (0.779 \times \%ADF)$

DMI = 120 / %NDF

1.72

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Lab No.: 37213	FEED ANALYSIS REPORT	Date Reported: 08/14/2018
18100	COLORADO AG EXP STATION SW COLORADO RESEARCH CENTER KATIE RUSSELL PO BOX 233 YELLOW JACKET, CO 81335	2018 Certified Chemistry DM NFTA DM ADF
Results For: Feedstuff Description: Sample Identification: Date Received:	TREATED	Edwin J. Mc Device Ed McGuire
Invoice No.:		Data Review Coordinator
Feed Analysis Results	As Received 100% Dry Matter	

USDA HAY QUALITY GUIDELINES: ALFALFA, ALFALFA/MIX (100% dry matter)

QUALITY	<u>CP %</u>	ADF %	NDF %	<u>RFV</u>
Supreme	> 22	< 27	< 34	> 185
Premium	20-22	27-29	34-36	170-185
Good	18-20	29-32	36-40	150-170
Fair	16-18	32-35	40-44	130-150
Utility	< 16	> 35	> 44	< 130

Crude protein (CP%) is not used in the RFV calculation, but may affect pricing. Visual appearance, intent of sale, end use, and other factors may influence hay price or feed value more than testing results. Regional pricing information is available from USDA Hay Marketing Service - Hay Reports. www.ams.usda.gov/market-news/hay-reports

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Lab No. : 37214	FEED ANALYSIS REPORT		Date Reported: 08/14/2018
Send To: 18100	COLORADO AG EXP STA' SW COLORADO RESEAR KATIE RUSSELL PO BOX 233 YELLOW JACKET, CO 81	CH CENTER	2018 Ce/tified Cytemistry WNFTA
	08/13/2018		Ed McGuire Data Review Coordinator
Feed Analysis Results	As Received	100% Dry Matter	
Moisture, %	8.8		
Dry Matter, %	91.2		
Crude Protein, %	20.4	22.4	
Acid Detergent Fiber, % Al	DF 29.0	31.8	
Neutral Detergent Fiber, %	NDF 34.8	38.2	
Total Digestible Nutrients,	% TDN 59.4	65.1	
Net Energy, Maint, Mcal/lb	0.61	0.67	
Net Energy, Gain, Mcal/lb	0.36	0.40	
Net Energy, Lact, Mcal/lb	0.61	0.67	
Digestible Energy, Mcal/lb	Beef D.E. 1.19	1.30	
Met. Energy, Beef, Mcal/lb	0.98	1.07	
Relative Feed Value, (RF	·V)	156	

RELATIVE FEED VALUE: Formula used:

Potassium, % K

 $RFV = (DDM \times DMI) / 1.29$

1.48

 $DDM = 88.9 - (0.779 \times \%ADF)$

DMI = 120 / %NDF

1.35

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Lab No. : 37214	FEED ANALYSIS REPORT	Date Reported: 08/14/2018
Send To: 18100	COLORADO AG EXP STATION SW COLORADO RESEARCH CENTER KATIE RUSSELL PO BOX 233 YELLOW JACKET, CO 81335	2018 Certified Chemistry by NFTA DM ADF
Results For:	RESEARCH CENTER	
Feedstuff Description:	ALFALFA HAY	Can a m M.
Sample Identification:	UNTREATED CHECK	Edwin J. Mc Deine
Date Received:		Ed McGuire
		Data Review Coordinator
Invoice No.:	592583	Data Neview Coordinator
Feed Analysis Results	As Received 100% Dry Matter	•

USDA HAY QUALITY GUIDELINES: ALFALFA, ALFALFA/MIX (100% dry matter)

<u>CP %</u>	ADF %	NDF %	<u>RFV</u>
> 22	< 27	< 34	> 185
20-22	27-29	34-36	170-185
18-20	29-32	36-40	150-170
16-18	32-35	40-44	130-150
< 16	> 35	> 44	< 130
	> 22 20-22 18-20 16-18	> 22	> 22

Crude protein (CP%) is not used in the RFV calculation, but may affect pricing. Visual appearance, intent of sale, end use, and other factors may influence hay price or feed value more than testing results. Regional pricing information is available from USDA Hay Marketing Service - Hay Reports. **www.ams.usda.gov/market-news/hay-reports**

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Lab No.: 5016	FEED	ANALYSIS REPORT	Date Reported: 10/30/2018
Send To: 18100	Send To: COLORADO AG EXP STA		2018 Ce/tified Cytemistry WNFTA
Results For: RESEARCH CENTE Feedstuff Description: ALFALFA HAY 1 TREATED RED 10/29/2018 Invoice No.: 595548			Ed McGuire Data Review Coordinator
Feed Analysis Results	As Received	100% Dry Matter	•
Moisture, %	11.0		
Dry Matter, %	89.0		
Crude Protein, %	19.6	22.0	
Acid Detergent Fiber, % A	DF 23.9	26.8	
Neutral Detergent Fiber, %	6 NDF 29.8	33.5	
Total Digestible Nutrients,	% TDN 62.6	70.4	
Net Energy, Maint, Mcal/lb	0.67	0.75	
Net Energy, Gain, Mcal/lb	0.42	0.47	
Net Energy, Lact, Mcal/lb	0.65	0.73	
Digestible Energy, Mcal/lb	Beef D.E. 1.25	1.41	
Met. Energy, Beef, Mcal/lb	1.03	1.16	
Relative Feed Value, (RF	-V)	189	

RELATIVE FEED VALUE: Formula used:

Potassium, % K

 $RFV = (DDM \times DMI) / 1.29$

1.46

 $DDM = 88.9 - (0.779 \times \%ADF)$

DMI = 120 / %NDF

1.30

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Lab No.: 5016	FEED ANALYSIS REPORT	Date Reported: 10/30/2018
18100	COLORADO AG EXP STATION SW COLORADO RESEARCH CENTER KATIE RUSSELL PO BOX 233 YELLOW JACKET, CO 81335	2018 Certified Chemistry by (NFTA) DM ADF
Results For:	RESEARCH CENTER	
Feedstuff Description:	ALFALFA HAY	Cara M M.
Sample Identification:	1 TREATED RED	Edwin J. Mc Deine
Date Received:	10/29/2018	Ed McGuire
		Data Review Coordinator
Invoice No.:	595548	Data Neview Cooldinator
Feed Analysis Results	As Received 100% Dry Matter	•

USDA HAY QUALITY GUIDELINES: ALFALFA, ALFALFA/MIX (100% dry matter)

<u>CP %</u>	ADF %	NDF %	<u>RFV</u>
> 22	< 27	< 34	> 185
20-22	27-29	34-36	170-185
18-20	29-32	36-40	150-170
16-18	32-35	40-44	130-150
< 16	> 35	> 44	< 130
	> 22 20-22 18-20 16-18	> 22	> 22

Crude protein (CP%) is not used in the RFV calculation, but may affect pricing. Visual appearance, intent of sale, end use, and other factors may influence hay price or feed value more than testing results. Regional pricing information is available from USDA Hay Marketing Service - Hay Reports. **www.ams.usda.gov/market-news/hay-reports**

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Lab No.: 5017	FEED	ANALYSIS REPORT	Date Reported: 10/30/2018
Send To: 18100	COLORADO AG EXP STATION SW COLORADO RESEARCH CENTER KATIE RUSSELL PO BOX 233 YELLOW JACKET, CO 81335		2018 Certified Chemisty NFTA DM ADF
Results For: Feedstuff Description: Sample Identification: Date Received: Invoice No.:	: ALFALFA HAY 2 UNTREATED WHITE 10/29/2018		Edwin J. Mc Dewie Ed McGuire Data Review Coordinator
Feed Analysis Results	As Received	100% Dry Matter	
Moisture, %	10.7		
Dry Matter, %	89.3		
Crude Protein, %	20.4	22.9	
Acid Detergent Fiber, % A	DF 21.3	23.9	
Neutral Detergent Fiber, %	6 NDF 26.4	29.6	
Total Digestible Nutrients,	% TDN 65.3	73.1	
Net Energy, Maint, Mcal/lb	0.71	0.79	
Net Energy, Gain, Mcal/lb	0.46	0.51	
Net Energy, Lact, Mcal/lb	0.68	0.76	
Digestible Energy, Mcal/lb	Beef D.E. 1.31	1.46	
Met. Energy, Beef, Mcal/lb	1.07	1.20	

RELATIVE FEED VALUE: Formula used:

Relative Feed Value, (RFV)

Potassium, % K

 $RFV = (DDM \times DMI) / 1.29$

221

1.38

 $DDM = 88.9 - (0.779 \times \%ADF)$

DMI = 120 / %NDF

1.23

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Lab No.: 5017	FEED ANALYSIS REPORT	Date Reported: 10/30/2018
Send To: 18100	COLORADO AG EXP STATION SW COLORADO RESEARCH CENTER KATIE RUSSELL PO BOX 233 YELLOW JACKET, CO 81335	2018 Certified Commistry WNFTA ADF MDF
Results For: Feedstuff Description: Sample Identification: Date Received: Invoice No.:	2 UNTREATED WHITE 10/29/2018	Edwin J. Mc Dewie Ed McGuire Data Review Coordinator
Feed Analysis Results	As Received 100% Dry Matter	-

USDA HAY QUALITY GUIDELINES: ALFALFA, ALFALFA/MIX (100% dry matter)

<u>CP %</u>	ADF %	NDF %	<u>RFV</u>
> 22	< 27	< 34	> 185
20-22	27-29	34-36	170-185
18-20	29-32	36-40	150-170
16-18	32-35	40-44	130-150
< 16	> 35	> 44	< 130
	> 22 20-22 18-20 16-18	> 22	> 22

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