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Renewable Thermal Solutions
Jay Perryman
1010 Southview Cir
Center TX 75935-4537

REPORT OF ANALYSIS

For: (72641) Renewable Thermal Solutions

Analysis	Level Found As Received	Level Found Dry Weight	Units	Reporting Limit	Method	Analyst-Date	Verified-Date
Sample ID: **7-21-24 Chris Alabama 783 lbs EW 37.8%**	Lab Number: **14359569**			Date Sampled: **2024-07-22**			
Moisture	11.45	///////	%	0.10	AOAC 930.15	agj8-2024/07/29	cmw4-2024/08/08
Dry matter	88.55	///////	%	0.010	Calculation	Auto-2024/08/21	Auto-2024/08/21
Protein (crude)	62.7	70.8	%	0.20	AOAC 990.03	jmr5-2024/07/29	cmw4-2024/08/08
Fat (crude)	23.8	26.9	%	0.10	AOAC 2003.05	kjf3-2024/07/29	cmw4-2024/08/08
Fiber (crude)	1.6	1.8	%	0.2	AOCS Ba 6a-05	acm5-2024/07/30	cmw4-2024/08/08
Ash	2.88	3.25	%	0.10	AOAC 942.05	acm5-2024/07/30	cmw4-2024/08/08
Total digestible nutrients	93.0	105	%	0.1	Calculation	Auto-2024/07/30	Auto-2024/08/21
Net energy (lactation)	0.98	1.11	Mcal/lbs	0.01	Calculation	Auto-2024/07/30	Auto-2024/08/21
Net energy (maint.)	1.05	1.19	Mcal/lbs	0.01	Calculation	Auto-2024/07/30	Auto-2024/08/21
Net energy (gain)	0.68	0.77	Mcal/lbs	0.01	Calculation	Auto-2024/07/30	Auto-2024/08/21
Digestible energy	1.86	2.10	Mcal/lbs	0.01	Calculation	Auto-2024/07/30	Auto-2024/08/21
Metabolizable energy	1.51	1.71	Mcal/lbs	0.01	Calculation	Auto-2024/07/30	Auto-2024/08/21
Sulfur (total)	0.69	0.78	%	0.01	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08
Phosphorus (total)	0.54	0.61	%	0.01	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08
Potassium (total)	0.75	0.85	%	0.01	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08
Magnesium (total)	0.06	0.07	%	0.01	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08
Calcium (total)	0.23	0.26	%	0.01	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08
Sodium (total)	0.27	0.30	%	0.01	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08
Iron (total)	194	219	ppm	5.0	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08

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Manganese (total)	12.3	13.9	ppm	1.0	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08
Copper (total)	12.4	14.0	ppm	1.0	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08
Zinc (total)	61.5	69.4	ppm	1.0	AOAC 985.01 (mod)	kad1-2024/07/29	cmw4-2024/08/08
Pepsin digestible protein	58.3	65.8	%	0.1	AOAC 971.09 & AOAC 2001.11	bmd8-2024/08/07	cmw4-2024/08/08
Pepsin digestible protein (% of total)	93.0		%	0.1	Calculation	Auto-2024/08/08	Auto-2024/08/21
Aspartic acid	5.01	5.66	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Threonine	2.66	3.00	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Serine	3.22	3.64	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Glutamic acid	7.94	8.97	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Proline	3.38	3.82	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Glycine	3.38	3.82	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Alanine	3.46	3.91	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Cystine	0.79	0.89	%	0.01	AOAC 994.12 (Alt. I)	bjh9-2024/08/12	alt8-2024/08/14
Valine	2.63	2.97	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Methionine	1.22	1.38	%	0.01	AOAC 994.12 (Alt. I)	bjh9-2024/08/12	alt8-2024/08/14
Isoleucine	2.31	2.61	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Leucine	4.27	4.82	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Tyrosine	2.02	2.28	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Phenylalanine	2.38	2.69	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09

REPORT DATE
Aug 21, 2024
SEND TO
72641
RECEIVED DATE
Jul 26, 2024
ISSUE DATE
Aug 21, 2024

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Lysine (total)	4.03	4.55	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Histidine	1.58	1.78	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Arginine	6.23	7.04	%	0.05	AOAC 994.12 (mod)	arr3-2024/08/09	akj2-2024/08/09
Tryptophan	0.57	0.64	%	0.01	AOAC 988.15 (mod)	Drl9-2024/08/21	akj2-2024/08/21
Aerobic plate count	259000		cfu/g	10	AOAC 2015.13	Jhv0-2024/07/27	jzh4-2024/07/27
E. coli (generic)	< 10		cfu/g	10	AOAC OMA 2018.13	Jhv0-2024/07/27	jzh4-2024/07/27
Total coliforms	< 10		cfu/g	10	AOAC OMA 2018.13	Jhv0-2024/07/27	jzh4-2024/07/27
Yeast	10		cfu/g	10	FDA/BAM Chapt. 18	smb8-2024/07/31	snl7-2024/07/31
Mold count	10		cfu/g	10	FDA/BAM Chapt. 18	smb8-2024/07/31	snl7-2024/07/31
Staphylococcus aureus	< 10		cfu/g	10	AOAC 2003.07	Ljm8-2024/07/28	jzh4-2024/07/28
Salmonella	negative		org/25g	1	AOAC OMA #2013.02; AFNOR QUA 18/08-03/15	Jhv0-2024/07/27	elh8-2024/07/27
Listeria	negative		org/25g	1	RapidChek/AOAC RI 020401	kkb0-2024/07/28	jzh4-2024/07/28

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cfu = colony forming unit , ppm = parts per million, ppm = mg/kg, ppm = mg/L Mineral analysis performed by ICAP using a wet digest procedure.

For questions please contact:

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