



September 18, 2006

**Mail To:**

**Mr. J. Clinton Hines, P.E.**  
**Carthage Mills Engineered Products, Inc.**  
4243 Hunt Road, Suite 210  
Cincinnati, OH 45242

**Bill To:**

**<= Same**

email: [chines@carthagemills.com](mailto:chines@carthagemills.com)  
Fax: 513-792-3099

Dear Mr. Hines:

Thank you for consulting TRI/Environmental, Inc. (TRI) for your geosynthetics testing needs. TRI is pleased to submit this final report for laboratory testing.

TRI Job Reference Number: E2265-61-08

Material(s) Tested: 1 Yarn

Test(s) Requested: Carboxyl End Group ( CEG) Count (GRI-GG7)  
Molecular Weight by Viscosity (GRI-GG8)

If you have any questions or require any additional information, please call us at 1-800-880-8378.

Sincerely,

A handwritten signature in black ink that reads "Jarrett A. Nelson". The signature is written in a cursive, flowing style.

Jarrett A. Nelson  
Special Projects Manager  
Geosynthetic Services Division  
[www.GeosyntheticTesting.com](http://www.GeosyntheticTesting.com)



## YARN TEST RESULTS

TRI Client: Carthage Mills Engineered Products, Inc.

Material: Polyester Yarn  
Sample Identification: No Label  
TRI Log #: E2265-61-08

PARAMETER	TEST REPLICATE NUMBER			MEAN	STD. DEV.
	1	2	3		
<b>Carboxyl End Group ( CEG) Count (GRI-GG7, ASTM D2455)</b>					
mmol/Kg	22.78	22.93	22.48	<b>22.73</b>	0.23
<b>Molecular Weight by Viscosity (GRI-GG87, ASTM D4603)</b>					
Molecular Weight (g/mol)	35358	37393	36691	<b>36481</b>	1034

The testing herein is based upon accepted industry practice as well as the test method listed. Test results reported herein do not apply to samples other than those tested. TRI neither accepts responsibility for nor makes claim as to the final use and purpose of the material. TRI observes and maintains client confidentiality. TRI limits reproduction of this report, except in full, without prior approval of TRI.