



March 6, 2014

**Mail To:**  
**Mr. Marat Goldenberg, P.E.**  
**CETCO**  
2870 Forbs Avenue  
Hoffman Estates, IL 60192

**Bill To:**  
**<= Same**

email: marat.goldenberg@cetco.com

Dear Mr. Goldenberg

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

Project: **JED Landfill**  
TRI Job Reference Number: E2388-14-05  
Material(s) Tested: Three Bentomat ST GCL  
Test(s) Requested: Index Flux (ASTM D 5887)

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

Sincerely,

John M. Allen, P.E.  
Division Director  
Geosynthetic Services Division  
[www.GeosyntheticTesting.com](http://www.GeosyntheticTesting.com)



GCL TEST RESULTS  
TRI Client: Hoffman Estates, IL 60192  
Project: JED Landfill

Material: Bentomat ST GCL  
TRI Log #: E2388-14-05

PARAMETER	TEST REPLICATE NUMBER										MEAN	STD. DEV.	PROJ. SPEC.
	1	2	3	4	5	6	7	8	9	10			
Index Flux (ASTM D 5887)													
Sample Identification: 564 Lot: 201409LO													
Index Flux (m³/m²/sec)		3.2E-09									3.2E-09		1.0E-08 max
Hydraulic Conductivity (cm/sec)		2.7E-09									2.7E-09		5.0E-09 max
Index Flux (ASTM D 5887)													
Sample Identification: 608 Lot: 201409LO													
Index Flux (m³/m²/sec)		3.3E-09									3.3E-09		1.0E-08 max
Hydraulic Conductivity (cm/sec)		2.9E-09									2.9E-09		5.0E-09 max
Index Flux (ASTM D 5887)													
Sample Identification: 652 Lot: 201409LO													
Index Flux (m³/m²/sec)		3.3E-09									3.3E-09		1.0E-08 max
Hydraulic Conductivity (cm/sec)		2.9E-09									2.9E-09		5.0E-09 max
MD Machine Direction	TD Transverse Direction				NA Not Available								