CLIENT: Max Liner
450 College Drive
Martinsville, VA 24112

Attn. Walter Mattox Re: Purchase Order No. 56

MATERIALS: One section of cured-in place pipe (CIPP) liner inside of a PVC pipe shell was submitted by the client and identified as shown below.

Sample No.	Sample Description
1	6" x 5mm (12" long)

TESTING: The following testing was conducted on specimens machined from the CIPP material. The plastic film liner was removed from each specimen prior to testing.

1. Flexural properties testing was conducted in accordance with ASTM D790-00, Procedure A, using a span to depth ratio of at least 16:1. The plastic liner was removed from all specimens and tested in full thickness as submitted.

2. Tensile properties testing was conducted in accordance with ASTM D638-00, Type I specimens with a cross-head speed of 0.2 inches/minute.

RESULTS: The results are summarized in Table 1 and presented in detail in Tables 2 and 3.

TABLE 1
SUMMARY OF TEST RESULTS

Sample ID	Average Flexural Strength (psi)	Average Flexural Modulus (psi)	Average Tensile Strength (psi)	Average Modulus of Elasticity (psi)
1	7,010	266,000	3,560	321,000

TESTING SUPERVISED BY:

Steve Ferry,
Section Manager

TESTING CONDUCTED BY:

Dale Beasley,
Technician III

TABLE 2
DETAILED FLEXURAL PROPERTIES

Sample ID	Flexural Strength (psi)	Flexural Modulus (psi)
6" x 5mm		
1	7,590	259,000
2	7,780	287,000
3	7,130	288,000
4	6,300	247,000
5	6,260	251,000
Average	7,010	266,000
Std. Dev.	710	20,000

TABLE 3
DETAILED TENSILE PROPERTIES

Sample ID	Tensile Strength (psi)	Modulus of Elasticity (psi)
6" x 5mm		
1	3,760	329,000
2	4,010	325,000
3	4,080	325,000
4	2,450	301,000
5	3,480	328,000
Average	3,560	321,000
Std. Dev.	660	12,000