

SOUTHWESTERN LABORATORIES

222 Cavalcade Street, 77009-3213 P.O. Box 8768, Houston, Texas 77249-8768 Tel (713) 692-9151 Fax (713) 696-6307

Attention: Kathryn Jones

Poly-Triplex

9851 Thomas Drive

Panama City, FL 32408

P: 850-249-0784 / F: 850/249-0787

W/O. No.:

POL056-04-28-57624-1

P.O. No.:

Report Date:

4/30/2004

PROJECT INFORMATION

D-LOAD BEARING TESTS

Method: ASTM Designation C497-98 AASHTO Designation T280-00

Two samples were received for testing. One was a Wheeling galvanized corrugated culvert pipe, and the second was a similar Wheeling galvanized corrugated culvert pipe with a PTLS-11600 liner. Both were subjected to a D-Load, or three-edge-bearing, test as directed in ASTM C497 for circular pipe. The corrugated pipes had a helical seam, that with the beginning of the seam placed on top, or at 12:00 position, would spiral along the length, culminating at the 9:00 position at the opposite end, or of 75% around the circumference. The beginning of the seam was located at this top position for the load bearing tests.

| Sample | Sample Length | Maximum Load Applied | Ultimate Strength | D-Load Strength |
|------------------------------------|---------------|-------------------------|----------------------|--------------------|
| Culvert pipe only | 2 ft. | 2,753 lbs. | 1,377 lbf/ft | 689 lbf/ft/ft |
| Culvert pipe with PTLS-11600 liner | 2 ft. | 6,190 lbs. | 3,095 lbf/ft | 1,548 lbf/ft/ft |

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Respectfully Submitted

Terry Wilt

Manager, Product Evaluation

Stork SWL, is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork group

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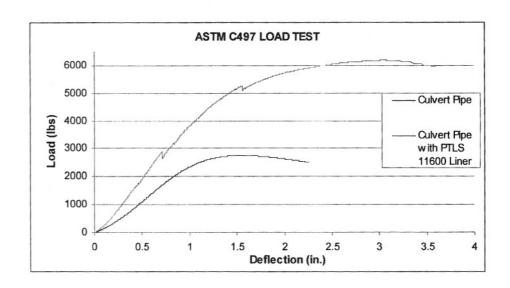


Chart plots actual applied load vs. pipe deflection.

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