Universal Laboratory, Inc.

1726 Commerce St. Garland, Texas 75040-6710

Date: 7-29-97

Test No.: 24210 Page 1 of 7 Requested By:

John A. Mazzetti

For: IDEAL

3200 Parker Drive

St. Augustine, FL 32095-0897

Background: Ideal submitted 2", 3" and 4" Couplings and Pipe for testing to the performance

requirements of Factory Mutual Research Corporation's Approval Standard, Class Number 1680, January 1989, Paragraphs 5.5.2-B on all and 5.8 on 4". Samples were received from customer supplied carrier on 6/3/97 in good

condition.

On 6-17-97, Charles Stanley, witnessed testing at Ideals' Facility in St. Augustine, FL, on 1-1/2", 2", 3", 4", 5", 6", 8" and 10" Couplings Per

Factory Mutual Research Corporation's Approval Standard,

"Couplings used in Hubless Cast Iron Systems for Drain, Waste or Vent, Sewer,

Rainwater or Storm Drain Systems Above and Below Ground Industrial/

Commercial and Residential", Class Number 1680, January 1989.

Test Results: Test Results Are Provided In The Attached Data Report.

CONCLUSION: IDEAL'S 304 STAINLESS STEEL HEAVY DUTY COUPLINGS

TESTED IN SIZES 1-1/2", 2", 3", 4", 5", 6", 8", and 10",

MEETS OR EXCEEDS THE SPECIFICATION REQUIREMENTS

PER FACTORY MUTUAL RESEARCH CORPORATION

APPROVAL STANDARD 1680, JANUARY, 1989.

Note:

"We Certify That All Portions Of Each Test Performed Were Under Continuous,

Direct Supervision Of This Laboratory."

Albert Navarro, Technician

Charles Stanley, Director

Universal Laboratory, Inc.