

DEEPWATER

MAXIM
TECHNOLOGIES INC

Maxim Technologies • Southwestern Labs

222 Cavalcade St. • P.O. Box 8768

Houston, Texas 77249

Telephone: (713) 692-9151

FAX: (713) 696-6307

Attention: Mr. Jim Britton
Inter Resources, Inc.
7007 Winding Walk Drive
Houston, Texas 77093

Report No. 61982
File No. 141660
Date: 10/24/96
P.O. No.: 3682

Project: Load Testing of Six I-Rods

PROJECT INFORMATION

Material: Six - longitudinal half-sections: 18" x 1½" x 0.648" to 0.657"
Identification: I-Rod
Date Received: October 21, 1996 *Technician:* Hugh Myers, Dennis Stanfield
Specifications: Per Client *Date of Test:* October 24, 1996
Test Equipment: Instron 4507, S/N H1963 *Procedure:* Load vs Crosshead Extension

TEST PROCEDURE

The I-rods were subjected to compressive loading with a fixture which simulated a 12"OD pipeline. Loading was applied, as shown in Figure No. 1, and crosshead extension was measured at 500 lb intervals. The rods were tested in sets of one, two and three, and a 100 lb pre-load was applied to each test array prior to any measurements. Multiple rods were tested with an 8" center to center width on the exterior rods.

TEST RESULTS

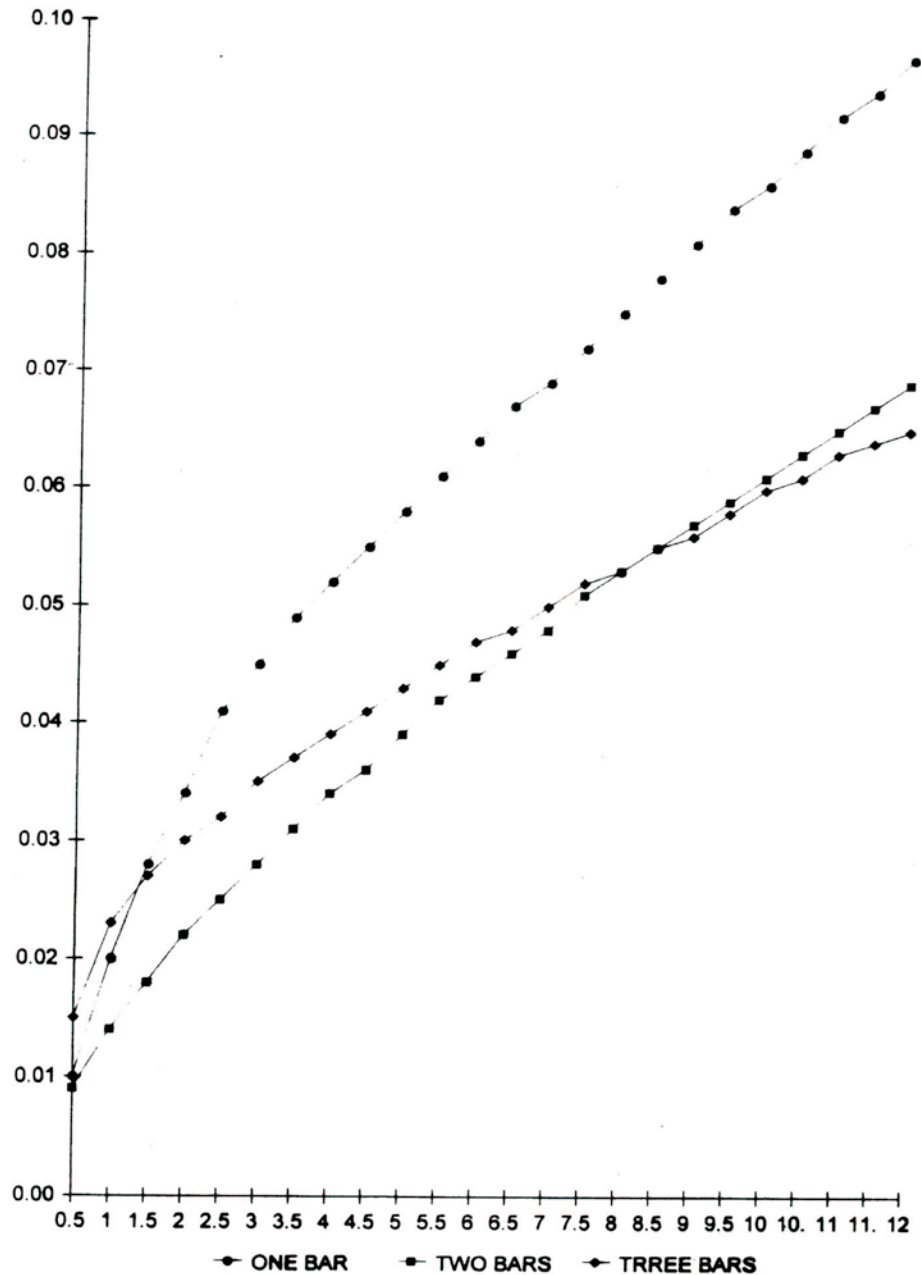
The load versus crosshead extension data is presented in the table below and in graphical form on the following page. The test set-up is illustrated in Figure No. 1 and various load-rod combinations are illustrated in Figures No. 2 to No. 7.

Load, lbs	Crosshead Extension, Inches		
	One Rod	Two Rods	Three Rods
500	0.010	0.009	0.015
1,000	0.020	0.014	0.023
1,500	0.028	0.018	0.027
2,000	0.034	0.022	0.030
2,500	0.041	0.025	0.032
3,000	0.045	0.028	0.035
3,500	0.049	0.031	0.037
4,000	0.052	0.034	0.039
4,500	0.055	0.036	0.041
5,000	0.058	0.039	0.043
5,500	0.061	0.042	0.045
6,000	0.064	0.044	0.047
6,500	0.067	0.046	0.048
7,000	0.069	0.048	0.050
7,500	0.072	0.051	0.052
8,000	0.075	0.053	0.053
8,500	0.078	0.055	0.055
9,000	0.081	0.057	0.056
9,500	0.084	0.059	0.058
10,000	0.086	0.061	0.060
10,500	0.089	0.063	0.061
11,000	0.092	0.065	0.063
11,500	0.094	0.067	0.064
12,000	0.097	0.069	0.065

Deepwater Corrosion Services Inc.
10851 Train Court, Houston, TX 77041 USA
Telephone +1 (713) 983-7117 Email sales@stoprust.com
www.stoprust.com

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Specifications subject to change without notice

LOAD VS CROSSHEAD EXTENSION



NOTE: The submitted material will be discarded after a period of 30 days unless otherwise directed.

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[Signature]

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Figure No. 1

Illustration of test set-up.

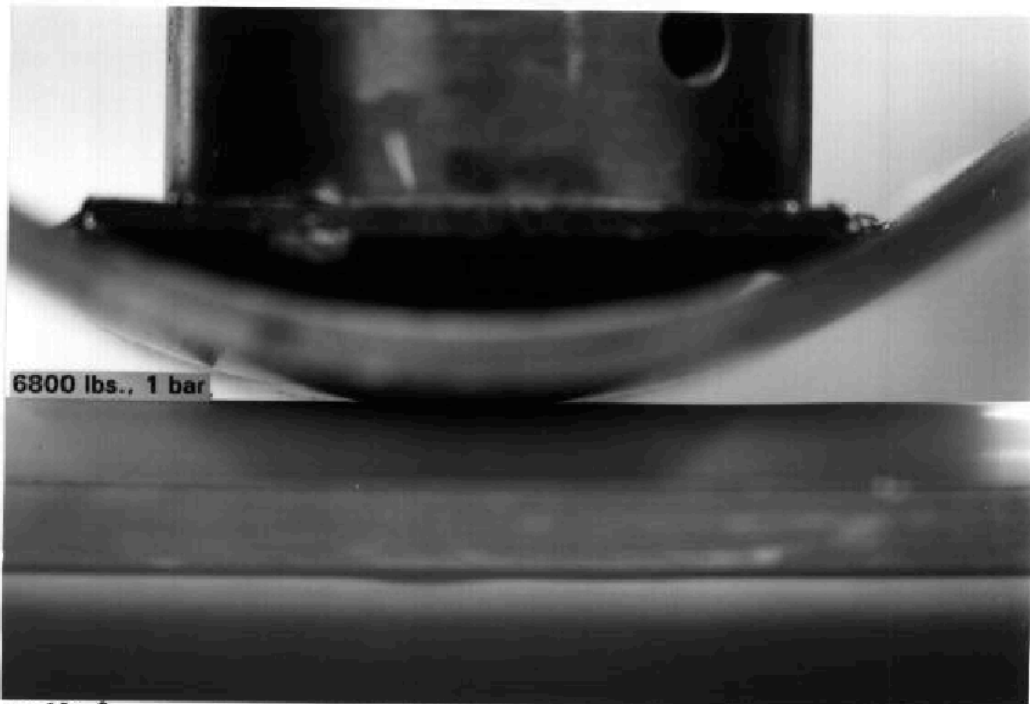


Figure No. 2

One bar, 6800 lbs.



Figure No. 3

One bar, 12,000 lbs.

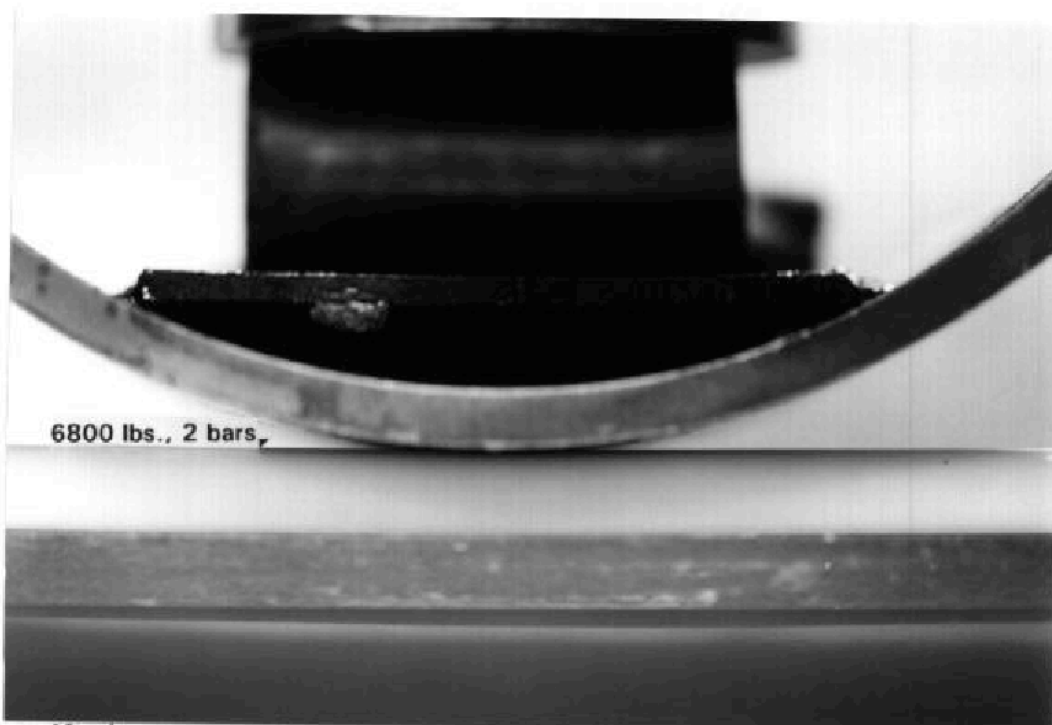


Figure No. 4

Two bars, 6800 lbs.

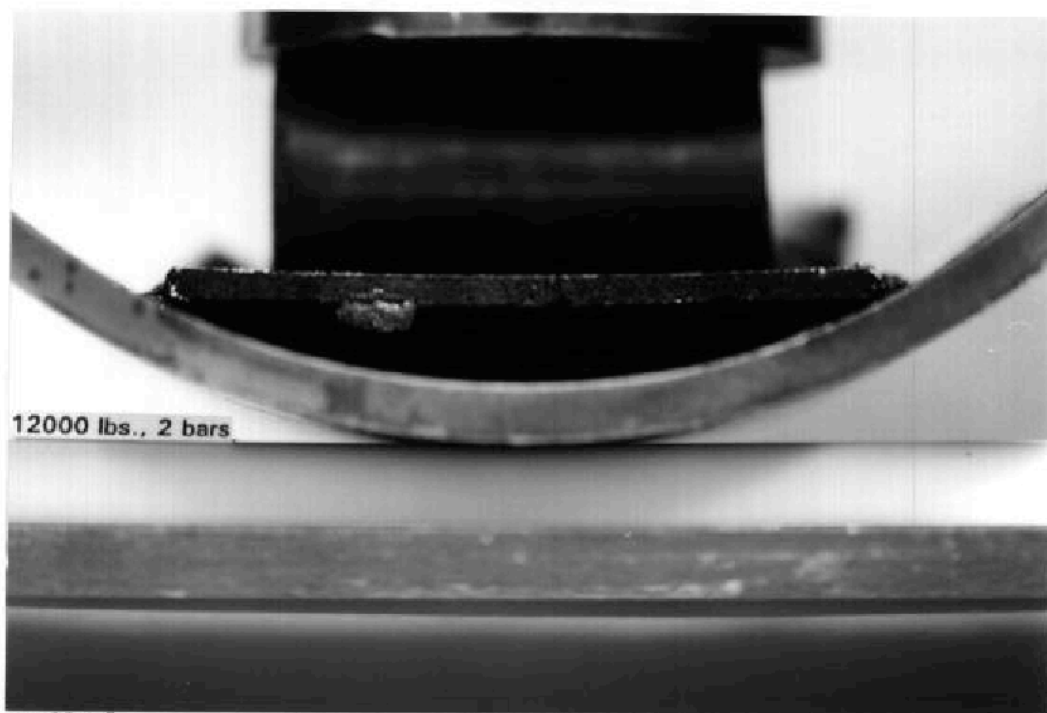


Figure No. 5

Two bars, 12,000 lbs.

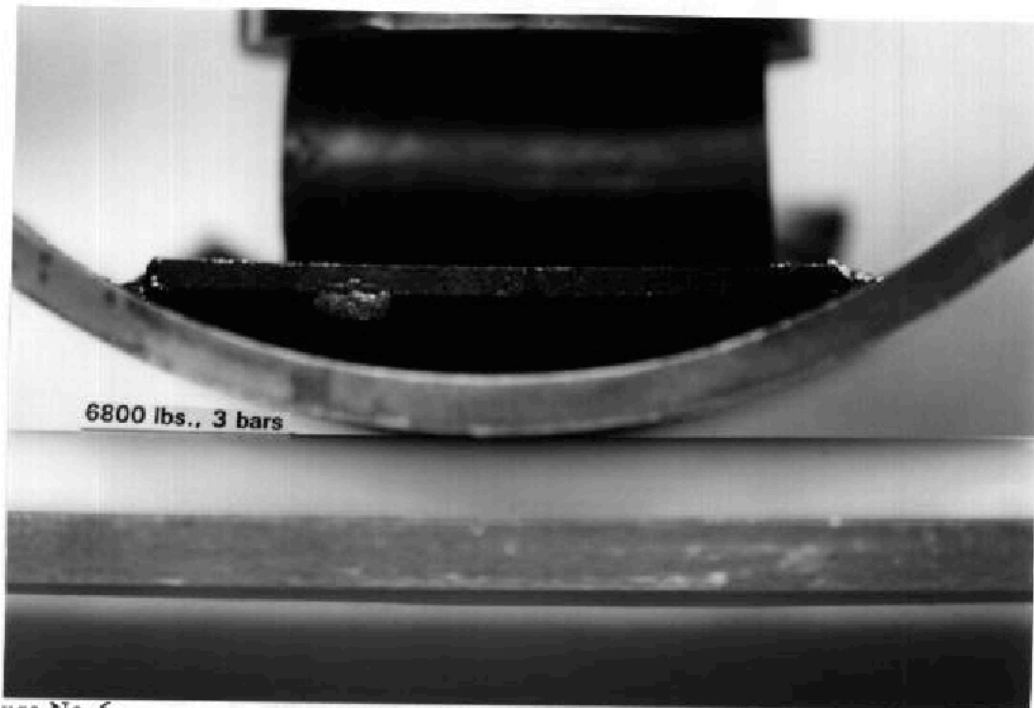


Figure No. 6

Three bars, 6800 lbs.

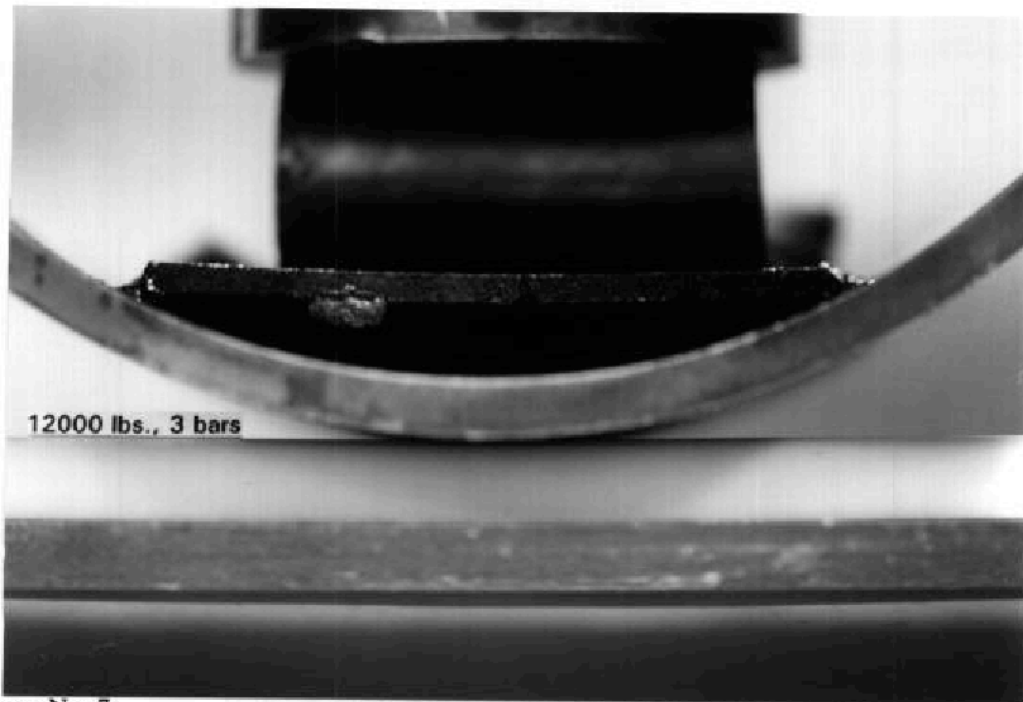


Figure No. 7

Three bars, 12,000 lbs.