



DES MOINES WATER WORKS

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BOARD OF WATER WORKS TRUSTEES
L.D. McMULLEN, Ph.D., P.E., CEO AND GENERAL MANAGER

May 14, 2004

Mr. Mark Enderson
Molecular Repair Concepts, Inc.
8058 Suncrest Dr.
Des Moines, IA 50320

Dear Mr. Enderson:

We recently contracted with 3E Company of Des Moines, Iowa to apply Belzona 1341 Supermetalgilde to the interior volute and impeller of a 1000 hp Worthington 16LN35 finished water pump. Our hope was to increase the wire-to-water efficiency of this 17 million gallon per day pump by three to four percent.

Des Moines Water Works personnel disassembled the pump and transported it to 3E's shop where the surface preparation and coating was performed by 3E personnel. 3E then balanced the rotating assembly and sent the pump back to our facility for installation by Des Moines Water Works.

Once installed, an eight day test was performed that compared the recently coated pump with an identical non-coated pump. Data collected included voltage, current, discharge pressure, and flow. The performance test showed an average increase of wire-to-water efficiency of 7.2%. The increased efficiency will save our water customers over \$7,400 annually!

Upgrading other finished water pumps with Belzona 1341 Supermetalgilde is definitely in our plans for the near future.

Thank you for your technical expertise and help throughout the project.

Sincerely,

Doug Oscarson
Supervisor of Mechanical Maintenance