Memo

TO:

M. W. Jones

FROM:

T. S. Fasca

SUBJECT:

Meeting with Sims Pump Inc. to discuss Pumps Life

Extension (T2023) at Station F.

DATE:

August 25,1992

036-92-001425



ATTENDANTS:

Carmen Trotta /Sims Pump/ Sales Engineer Andre Gage Paul Bourdeau Tom Schleip Ted Fasca

A meeting with Sims Pump Valve Company took place on August 24, 1992 at 10:30 a.m. to discuss accelerated corrosion/erosion problems with River Water, Ash Hopper Overflow Sump, Screen Wash, and Circulating Water pumps. The above mentioned pumps with exception to the Circulating pumps are experiencing accelerated corrosion/erosion with an average pump life ranging from 7-14 months. The Circulating Water pump is being evaluated on corrosion and erosion and overall wear on internal components.

Sims currently manufacturers composite pumps made from Simsite. Simsite is a combination-fiber reinforced composite with phenolic resin. The fibers are interwoven in a bidirectional or tri-directional weave. Individual components are machined (as opposed to being cast) from solid blocks of Simsite. The individual components such as impellers are lighter in weight and exhibit lower coefficient of friction than the metallic counter parts. Attachment #1 contains engineering data on the various composite grades available.

Several impellers and bearings made from Simsite was readily available for closer examinations. Two approximately 9" impellers (1 composite & 1 Bronze) were actual obtained from service. The Bronze impeller was in service for several years (approximately 3) and demonstrated signs of cavitation pitting and general wear. The Simsite composite impeller was in service for approximately 13 years and exhibit virtual no signs of wear.