

Figure 1: Containment Shell Damage

Figure 1 shows the damage to the containment shell. The four holes at the top of the shell are in the plastic shroud that holds the carbon silica pump shaft in place. The pump shaft as seen in Figure 2, has a hole bored in the center, which allowed the nitric acid from the suction side of the pump to flow straight through the containment shell.



Figure 2: Impeller Shaft



Plastic impeller shaft shroud. Leak point of nitric acid

Figure 3: Detailed cutout of Innomag pump



Figure 4: Impeller wear ring showing signs of dry running according to manufacturer