Centrifugal pump back-plate erosion

Impeller from motor side. Concave scallop around end of wear ring. Balance holes through impeller.

Impeller radial view. Scallop wear on motor side of impeller. Otherwise the impeller is fine.
Motor side backing plate. Wear behind impeller and beside seal.

Mechanical seal with stationary seal in back plate and rotary seal on the shaft.
Wear points on back-plate behind end of impeller wear ring and around shaft.
Back pull-out pumps opened up. Back plate wear is occurring behind the impeller.